



Virginia Commonwealth University
VCU Scholars Compass

Theses and Dissertations

Graduate School

2014

CYBERBULLYING: AN EXAMINATION OF GENDER, RACE, ETHNICITY, AND ENVIRONMENTAL FACTORS FROM THE NATIONAL CRIME VICTIMIZATION SURVEY: STUDENT CRIME SUPPLEMENT, 2009

Mary Howlett-Brandon
Virginia Commonwealth University

Follow this and additional works at: <http://scholarscompass.vcu.edu/etd>

 Part of the [Educational Leadership Commons](#)

© The Author

Downloaded from

<http://scholarscompass.vcu.edu/etd/3470>

This Dissertation is brought to you for free and open access by the Graduate School at VCU Scholars Compass. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of VCU Scholars Compass. For more information, please contact libcompass@vcu.edu.

CYBERBULLYING: AN EXAMINATION OF GENDER, RACE, ETHNICITY, AND
ENVIRONMENTAL FACTORS FROM THE NATIONAL CRIME VICTIMIZATION
SURVEY: STUDENT CRIME SUPPLEMENT, 2009

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of
Philosophy at Virginia Commonwealth University.

by

Mary A. Howlett-Brandon
B.S.W., University of Mississippi, 1983
B.A., Park University, 1996
M.Ed., Old Dominion University, 2001

Director: Charol Shakeshaft, Ph.D.
Professor, Department of Educational Leadership
School of Education

Virginia Commonwealth University
Richmond, Virginia
April, 2014

ACKNOWLEDGEMENTS

My interest in cyberbullying arose out my experiences as an administrator at Brooke Point High School in Stafford County, VA. Over my 7 years as an assistant principal, I noticed more and more parents calling asking that I do something about a student who had posted something ugly about their child on MySpace and later Facebook. As smart phones and texting became more popular, parents, and even students, demanded help resolving issues arising from the use of these devices to access the Internet, to text, and to post hurtful pictures and comments on websites.

I would first like to thank Dr. Charol Shakeshaft for her unwavering support of me through this journey. Without her support, this dissertation would not have been completed. She does not know how many times I wanted to quit but her quiet encouragement gave me the strength to persevere. I want to thank Dr. Whitney Sherman Newcomb and Dr. Jonathan Becker for staying the course with me, even during long periods of silence. To Dr. Joyce Kincannon, I give deep and heartfelt thanks. She came to my rescue by agreeing to serve on my committee after a vacancy on the committee occurred.

To my brother and sister of the heart, Thomas and Gail E. Jenkins, I say thank you. You refused to let me stop. You talked me through frustrations with processing data and kept me fed and laughing. To my close friends, James and Carlena Belt, I thank you for being a part of my support network. Carlena, our weekend walks helped to keep me sane.

Finally, I offer my love and gratitude for 30 years of support to my husband Llewellyn Brandon. Without you the wonderful life I have had would not have been possible. Thank you for your quiet support, faith in me, and love. I hope that we have at least 30 more years to enjoy this journey.

TABLE OF CONTENTS

	Page
LIST OF TABLES	vi
ABSTRACT.....	vii
1. INTRODUCTION	1
Overview of the Literature.....	1
Statement of the Problem.....	3
Purpose of the Study	4
Research Questions	4
Definitions.....	5
2. LITERATURE REVIEW	6
Definition	7
Characteristics of Cyberbullying	10
Adolescent Use of Electronic Communication Technology and the Internet.....	12
Prevalence of Cyberbullying.....	16
Patterns in Cyberbullying	25
Race/Ethnicity.....	25
Gender Differences in Cyberbullying.....	27
Attendance and Academic Performance.....	32
Attendance	32
Academic Performance	34
Age/Grade.....	35
School Cyberbullying Policies	36
School Environment.....	38
Relationship Between Bullying, Cyberbullying, and the School Environment	39
Statement of the Problem.....	40
Purpose of the Study	41
Research Questions.....	41
Study Limitations.....	42

	Page
3. METHODOLOGY	43
Description of National Crime and Victimization Survey Data	43
Survey Development	43
Sample Design and Size.....	44
Method of Data Collection.....	45
National Crime and Victimization Variables in Study	46
Data Analysis	46
4. RESULTS	48
Results	48
5. DISCUSSION	58
Relationship to Literature on Cyberbullying	61
Implications for Research	65
Implications for Policy and Practice in Schools	67
Limitations of the Study.....	68
LIST OF REFERENCES	70
APPENDIX	
A. National Crime Victimization Survey: School Crime Supplement, 2009	85
VITA	99

LIST OF TABLES

Table	Page
1. Adolescent Time Spent Online	17
2. Prevalence of Cyberbullying	22
3. Percentage of Cyberbullying Reported by Race/Ethnicity	28
4. Gender Difference With Cyberbullying Perpetrators.....	33
5. Research Questions and Methodology	47
6. Cyberbullying Mean, SD, and Range by Race.....	49
7. Cyberbullying by Race and Type.....	50
8. Cyberbullying Mean, SD, and Range by Gender	50
9. Cyberbullying by Gender and Type	51
10. Porportion of Cyberbullying by Race and Gender.....	52

ABSTRACT

CYBERBULLYING: AN EXAMINATION OF GENDER, RACE, ETHNICITY, AND ENVIRONMENTAL FACTORS FROM THE NATIONAL CRIME VICTIMIZATION SURVEY: STUDENT CRIME SUPPLEMENT, 2009

By Mary A. Howlett-Brandon, Ph.D.

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

Virginia Commonwealth University, 2014

Major Director: Charol Shakeshaft, Ph.D.
Professor, Department of Educational Leadership
School of Education

Cyberbullying has become an issue of concern during the past decade for schools, parents, students, and communities. Media attention to extreme instances of cyberbullying has resulted in misinformation. Myths abound about cyberbullying and accurate information can be hard to find. This study attempts to shed light on this controversial issue. Using the National Crime Victimization Survey: Student Crime Supplement, 2009, this research focuses on the cyberbullying victimization of Black students and White students in specific conditions. These include racial and gender differences, grades, attendance, school environment, and student perception of teacher attitudes towards them.

CHAPTER 1. INTRODUCTION

During the last two decades, a new form of bullying has become a concern for students, parents, and educators alike. This form of bullying is commonly known as cyberbullying. Newspapers and other media around the nation have drawn public attention to this phenomenon. A Google search of three major U.S. newspapers highlights public interest in cyberbullying. A search of the term cyberbullying in the *Washington Post* produced 111 articles, editorials, and blogs addressing cyberbullying from January 2005 to April 2014. Of note amongst these articles is a 2011 article reporting the Supreme Court's decision to decline to hear a series of cases on student speech and the First Amendment as it relates to inflammatory postings on social networks by students. Querying the *New York Times* using the term cyberbullying resulted in 488 articles from September 2009 to April 2014. The topics of these articles range from the speed at which information can travel once posted to a social network to how schools should handle cyberbullying. Again using Google as the search engine resulted in 100 articles on cyberbullying published in the *Chicago Tribune* from May 2007 to April 2014. The articles published in these three major newspapers show that there is strong interest in cyberbullying by the media.

Overview of Literature

For adolescents, the ability to use computers and the Internet is a highly useful skill set. Much of their socializing and education will require the use of electronic communication technology and the Internet. David-Ferdon and Feldman (2007) note that electronic media

enhances the lives of adolescents in many ways but also brings with it the specter of bullying in cyberspace. Additionally, the rapid increase in the development of electronic technology, to include handheld technology such as cell phones, has created opportunities for students to participate in social aggression using portable devices (Beran & Li, 2005; Li, 2006; Smith et al., 2008). Moreover, electronic technology allows adolescents unlimited access to potential victims (David-Ferdon & Feldman, 2007; Patchin & Hinduja, 2006). Use of electronic communication technology also lends itself to secrecy on the part of the perpetrator (Li & Beran, 2003; Kowalski & Limber, 2007; Li, 2008). Mason (2008) adds that cyberbullying provides an opportunity for a covert alternative to traditional bullying.

Cyberbullying is a form of bullying that has grown out of the widespread use of the technology and the Internet by adolescents. Unlike traditional bullying, cyberbullying is not limited to the school campus. Further, cyberbullying frequently impacts students' social interaction at school and creates situations that require the intervention of teachers, counselors, and administration. There is a great degree of consensus among researchers that adolescents are using electronic communication technology to cyberbully (Turner, Finkelhor, Hamby, Shattuck, & Ormrod, 2011). These researchers have examined cyberbullying from a number of perspectives. They include certain populations (gender, age, grade, and race/ethnicity), and the scope and nature of cyberbullying (Ang & Goh, 2010; Kowalski & Limber, 2013). Preliminary research has been conducted on how cyberbullying impacts students' academic performance, school attendance, and schools' response to cyberbullying in policies and written codes of student conduct (Kessel Schneider, O'Donnell, Stueve, & Coulter, 2012).

In 2004, leading researchers of cyberbullying, Ybarra and Mitchell noted that Internet harassment is a sparsely documented phenomenon with available research indicating that

statistical reports of Internet harassment warrant concern and further study. In 2005, Beran and Li wrote, “Researchers have yet to examine systematically the nature of cyber-bullying” (p. 266). David-Ferdon and Feldman (2007) recommend research studies that ask a series of questions that query the multiple methods used to cyberbully in order to provide a clearer view of the scope, character, and impact of this form of adolescent aggression. Patchin and Hinduja, in a research article published in 2008 state that empirical research on the phenomenon commonly called cyberbullying is in its infancy. Further, these two researchers comment in a 2010 article “an embryonic body of literature on cyberbullying has been established” (p. 615). Vanderbosch and Van Cleemput (2009) observe that the available literature is “largely fragmented” (p. 1350). Cyberbullying research is still in the early stages due to the relatively recent recognition of adolescents’ use of electronic communication technology to victimize others.

Statement of the Problem

Cyberbullying is a complex issue concerning adolescent behavior. Studies into cyberbullying have resulted in conflicting conclusions amongst researchers. The literature does not illustrate consensus on gender differences in cyberbullying. Nor is there consensus on the impact of cyberbullying on school attendance and academic achievement. Review of the literature highlights that there are few studies on race/ethnicity particularly amongst students to include minority students. Similarly, the relationship between traditional bullying, cyberbullying, and the impact of the school environment warrants further study among minority students. A study of a large national sample will draw attention to how minority adolescents participate in and are impacted by cyberbullying.

Purpose of the Study

Research into cyberbullying behaviors has investigated a number of issues surrounding this phenomenon; however, there is a lack of information about minority students and their cyberbullying behavior. This research project examined the role of race and gender, school attendance and grades, and the relationship of codes of conduct and school environment in the cyberbullying of Black students juxtaposed to White students.

Research Questions

This study was designed to determine if there are differences between minority students and White students who were victims of cyberbullying. This study will examine cyberbullying from the perspective of race, gender, school attendance, role of the student code of conduct, school environment, and grades.

1. Are there differences in the level of cyberbullying victimization based on race and gender?
2. Is there a relationship between the extent of cyberbullying directed toward Black victims and school attendance?
3. Are there differences in levels of cyberbullying victimization between Black students who report that their school has a published student code of conduct on cyberbullying and students who did not report that their school had a published student code of conduct on cyberbullying?
4. What is the relationship of measures of school environment to cyberbullying victimization amongst Black students?
5. Is there a relationship between earned grades and cyberbully victimization for Black students?

Definitions

Cyberbullying—adolescents (13-19 years old) who use electronic media to include cell phones to harass, manipulate, and threaten other adolescents.

CHAPTER 2. LITERATURE REVIEW

With the rapid development of electronic communication technology opportunities for adolescents to use computers, the Internet, cell phones and other mobile devices to bully their peers have arisen. Cyberbullying is a relatively new phenomenon in the lexicon of adolescent bullying. Berson, Berson, and Ferron (2002) state, “Today’s youth are the first generation to be raised in a wired world where computers are a common entity in classrooms and homes” (p. 54). Adolescents are using electronic communication technology and their skills navigating the Internet to bully. This behavior is commonly referred to as cyberbullying. Berson et al. (2002) note that affluence and in-home access to computers and the Internet does not limit this type of behavior to a certain group of adolescents. The availability of computers and the Internet in schools and public libraries makes electronic bullying accessible to most adolescents. Handheld devices that provide access to the Internet have made cyberbullying even easier.

In this review existing research is used to illustrate the growth of cyberbullying, types of electronic media used by adolescents to cyberbully, and the types of studies that have been conducted on this practice. A review of the definition and conceptualization of cyberbullying is also presented. Next a comprehensive review of existing research on cyberbullying is discussed. Finally, a summary of what this literature means in terms of the research questions posed in this study is presented.

In order to find articles related to cyberbullying, the Virginia Commonwealth University’s online library services were used to conduct the literature search. ERIC, Academic

Research Complete, APA PsycNET, and Education Research Complete databases were utilized. The search terms used were *bullying*, *cyberbullying*, *cyber-bullying*, *cyber bullying*, *electronic bullying*, *student aggression*, *cyber harassment*, and *adolescence*. These terms were used singly and in various combinations. The search was limited to scholarly peer-reviewed journal articles. As articles were located, the reference pages were combed to locate other studies on the topics of interest. These articles were then located and examined for potential inclusion in the literature review. Finally, Google Scholar was used to search the terms listed above. The result was 870 peer-reviewed studies were identified and examined between January 2009 and April 2014.

Definition

A number of researchers have worked to define and conceptualize cyberbullying. Ybarra and Mitchell (2004) define cyberbullying or Internet harassment as “an overt, intentional act of aggression towards another person online” (p. 1308). Beran and Li (2005) state that “cyberbullying is the repeated and intentional use of various forms of technology such as cell phones, pagers, e-mail, instant messaging, the Web sites by individual or groups to harm others” (p. 267). Patchin and Hinduja (2006) define cyberbullying “as willful and repeated harm inflicted through the medium of electronic text” (p. 152). Juvonen and Gross (2008) describe cyberbullying as use of the Internet and other communication technology to insult or threaten another individual. Further, Ang and Goh (2010) note that cyberbullying is a willful act in which an individual intentionally seeks to harm using technology and the Internet as the medium to perpetrate injury to an individual. Olweus (2013) defines cyberbullying as “as bullying performed via electronic forms of contact or communication such as mobile/cell phones or the Internet” (p.765). Researchers have also expanded on this basic definition by examining the characteristics of cyberbullying. Ybarra and Mitchell (2004) note a unique aspect of cyberbullying: aggressors are

removed from their victims. Raskauskas and Stoltz (2007) add the methods used by cyberbullies—messages, pictures, and web pages via electronic media—to tease, harass, manipulate, and threaten their victims as characteristics of this form of bullying.

In order to provide an expansive view of the scope of the acts associated with cyberbullying, Willard (2007) identified and organized cyberbullying into eight different categories: flaming, harassment, denigration, cyberstalking, impersonation, outing, trickery, and exclusion. Willard defines flaming as an angry online fight using derogatory language. Harassment as defined by Willard is the repeated sending or posting of mean and insulting messages. Denigration is disrespect or “dissing” someone online by spreading gossip and rumors to hurt an individual’s reputation. To repeatedly send or post messages that contain threats and/or invoke intense fear is called cyberstalking. Impersonation is when a cyberbully pretends to be the victim and posts information and photographs that damage the intended victim’s reputation or to get the victim in trouble. Outing is when a cyberbully uses electronic media to share personal or embarrassing information about the victim. Talking to someone online in order to get the individual to reveal secrets or embarrassing information and then forwarding or posting this information is termed trickery. Exclusion is to cruelly and intentionally block someone from social network friends groups, chat rooms, and other online gathering places.

Taking a different approach to defining cyberbullying, Vandebosch and van Cleemput (2008) conducted a qualitative study of 279 students, aged 10 to 18, organized into 53 focus groups to determine how students defined cyberbullying. Vandebosch and van Cleemput (2008) used the three commonly accepted characteristics of the definition of traditional bullying: intention to hurt, power imbalance, and repetition as the primary focus of the study. Vandebosch

and van Cleemput (2008) found that these characteristics applied to cyberbullying in unique ways. First, Vandebosch and van Cleemput (2008) found that respondents reported that using electronic media to intentionally hurt someone was a goal of the perpetrator. Further, they noted that the ability to use electronic media anonymously provided an opportunity for students who would not bully using traditional methods the opportunity to cyberbully. The respondents, however, made a distinction between teasing and hurting someone. Secondly, power imbalance was a significant characteristic of cyberbullying but real world bullying characteristics such as size and social status were not relevant in the cyber world. According to Vandebosch and van Cleemput (2008), respondents' knowledge and ability to use electronic communication technology was viewed as a form of power. Repetition was an important factor in the respondents' definition of cyberbullying. Further, the students reported that the act of repetition could be a combination of both cyberbullying acts and traditional bullying.

Further, Vandebosch and van Cleemput (2008) questioned whether the use of cell phones should be classified as cyberbullying because the respondents of their study generally identified harassment via the Internet as cyberbullying. However, the proliferation of cell phones and the many features included (photographic capability, text messaging, Internet access) have caused some researchers to include cell phones in the category of electronic communication technology (Beran & Li, 2005; Frisen, Jonsson, & Persson, 2007; Li, 2007; Patchin & Hinduja, 2007; Raskaukas & Stoltz, 2007). While cyberbullying does not have an exactly worded and agreed upon definition, use of electronic media, intent to harm, and repetition are recurring themes among researchers (Moore, Huebner, & Hills, 2012; Perren, Dooley, Shaw, & Cross, 2010; Perren, & Gutzwiller-Helfenfinger, 2012; Smith, Mahdavi, Carvalho, Fisher, Russell & Tippett, 2008) . Finally, a number of researchers highlight perhaps one of the more insidious

characteristics of cyberbullying—unlimited access to victims. Cyberbullying can occur at any time of the day or night, 24 hours a day, 7 days a week (David-Ferdon & Feldman, 2007).

Patchin and Hinduja (2006) and Slonje and Smith (2008) add that cyberbullies have unprecedented access to potential victims due to the proliferation of electronic media.

In a study published in the *American Journal of Public Health* in January 2012, Schneider et al. (2012) note that the range of definitions and the rapid advances in electronic communications technology make it difficult to establish a comprehensive and static definition of cyberbullying. In this study, cyberbullying will be defined as adolescents (13-20 years old) who use electronic media to include cell phones to harass, manipulate, and threaten other adolescents.

Kowalski, Guimetti, Schroeder, and Lattanner (2014) noted a general consensus that cyberbullying involves using electronic communication technology to bully. They go on to state that there is no consensus on other parameters which can be used to define cyberbullying. Because of the issues with defining cyberbullying, prevalence rates are wide ranging. Other issues with conceptualizing cyberbullying include the forms cyberbullying can take and the settings used to cyberbully.

Characteristics of Cyberbullying

In addition to the problems conceptualizing a definitive definition of cyberbullying, Dehue, Bolman and Völlink (2008) state that cyberbullying is repetitious and intentional, causes psychological harm, and occurs anonymously. Further, Dehue et al. (2008) note that a lack of physical social cues removes the perpetrator from the reaction of the victim and the consequences of their actions. The anonymity of cyberspace may also be empowering in that

this method of bullying minimizes the probability of retaliation by the cyber-victim (Koinig, Gollwitzer, & Steffgen, 2010).

Another, perhaps enabling, characteristic of cyberbullying that coexists with anonymity is a reduced fear of being caught participating in cyberbullying behavior and escape from potential consequences (Beale & Hall, 2007). Approximately two-thirds of the respondents in this study reported that they knew their perpetrators. This provides support to Juvonen and Gross' (2008) contention that anonymity might not be the shield some researchers have reported. Raskauskas and Stoltz (2007) queried their sample and 73% of the respondents indicated that they knew or were fairly certain that they knew their harasser. Like Raskauskas and Stoltz, Li (2007) also asked students if they knew who had cyberbullied them. Almost 41% of the students reported that they did not know who had cyberbullied them. More than 31% of the students reported being bullied by schoolmates while the remainder reported being cyberbullied by individuals outside school or by multiple individuals—some known and some unknown to them. In a study of 42 students identified with attention deficit hyperactivity disorder (ADHD) and/or Asperger Syndrome and their cyberbullying behaviors, Kowalski and Fedina (2011) reported that 50% of the of the students said that the cyberbully was a friend, 37.5% said it was a student and school, and 25% of the subjects did not know who had cyberbullied them. These studies suggest that cyberbullies may be known by their victims and that anonymity may not be as strong a factor in cyberbullying as some claim.

An additional characteristic of cyberbullying is the low level of reporting of this form of bullying by adolescents. This allows cyberbullying to occur for long periods of time before adults become aware that an adolescent is the victim of cyberbullying (Juvonen & Gross, 2008). Ninety percent of the respondents of the Juvonen and Gross' (2008) study indicated that they had

not reported the cyberbullying to an adult. Another distinguishing trait of cyberbullying is that electronic communication technology allows messages and images to be transmitted quickly to a wide audience. Kowalski and Limber (2007) suggest that these elements of cyberbullying may heighten adolescents' perceptions of vulnerability to their potential to be cyberbullied.

Noting that power imbalance is one characteristic in some definitions of cyberbullying, Pieschl, Porsch, Kahl, and Klockenbasch (2013) focused on power imbalance in cyberbullying to determine if power is a factor in cyberbullying. Their study revealed that power in terms of perceived popularity of the cyberbully was a factor in cyberbullying with their study participants. Participants were asked to think of a popular student and an unpopular student at their school to use in the study's prepared scenarios. Results showed that participants felt more distressed when cyberbullied by a popular student than a less popular student.

In summary, just as with defining cyberbullying, the characteristics that make up cyberbullying are inconclusive. As noted above, some students claim to know whom cyberbullied them while others reported that they did not know who cyberbullied them that makes the notion of anonymity less clear in terms of the role it plays in cyberbullying. While using cyber space to cyberbully is not in question, most of the characteristics used to define cyberbullying are adapted from traditional bullying and some leading researchers question if cyberbullying is a separate phenomenon or an extension of traditional bullying (Olweus, 2013; Ybarra, Boyd, Korchmaros, & Oppenheim, 2012).

Adolescent Use of Electronic Communication Technology and the Internet

Adolescents have taken the educational and social capability of electronic media and the Internet in unintended directions by using electronic devices to bully other adolescents (Berson, et al, 2002; Cassidy, Jackson, & Brown, 2009). Using electronic media to cyberbully has the

potential to negatively impact students across social and cultural spheres: home, school, and within the community at large (Wright, Burnham, Inman, & Ogorchock, 2009). Further, Raskauskas and Stoltz (2007) found it significant that nearly 65% of their participants had access to a cell phone. Kowalski and Limber (2007) noted that 50% of adolescents in their study used cell phones and 97% were regular users of the Internet. Kowalski and Limber (2007) stated that cyberbullying has become an international phenomenon, which has reached beyond the schoolyard.

In a study of gender differences, prevalence of, and mental health problems associated with traditional and cyber bullying amongst rural middle school students in Hawaii, Chin (2011) reported the following about her 211 respondents' access to electronic communication technology: email address—almost 67%, cell phone—almost 62%, computer in bedroom—58%, social networking page—almost 51%. In a research project involving rural students, Navarro, Serna, Martinez, and Ruiz-Oliva (2013) found that 100% of their 1,068 participants had Internet access at home.

Berson et al. (2002) conducted a study of 10,800 adolescent females. The study was collaboration between *Seventeen Magazine Online*, CyberAngels, the College of Education at the University of South Florida, and the Department of Child and Family studies at the Louis de la Parte Florida Mental Health Institute. The study provided information about the amount of time and locations where girls access technology. Conducted via the Internet, the study provided insight into how girls aged 12-18 years old use electronic communication technology. Fifty percent of the respondents were 14-15 years old, 22% were 12-13 years old, 30% were 16 or older, and 26% were middle school age. When asked about time spent online, 30% of the respondents reported spending 3 to 5 hours online weekly. Almost one-quarter reported

participating in online activities 6 to 9 hours each week, and 12% reported spending 10 to 12 hours online weekly. Adolescents who spent more than 12 hours a week online weighed in at 15% of the sample with girls who spent 2 hours or less online representing 20% of the sample. Ninety-two percent of these adolescents accessed the Internet from home. The respondents reported using the Internet to instant message or e-mail friends (58%), surf for new things (20%), and visit chat rooms (16%). Only 1% of the sample related using the Internet for gaming, reading discussion boards, and doing homework or research. This pervasive use of the technology provides an opportunity for students to participate in cyberbullying and to be victimized through the use of technology.

In 2008, Juvonen and Gross conducted a study of 1,454 male and female adolescents and found that most of their respondents had 3 or more years of experience using the Internet. These adolescents reported that e-mail (49%) and instant messaging (58%) were the most frequently used communication tools. More than half of the respondents reported using profile sites, blogs, text messaging, chat rooms, and message boards.

Erdur-Baker (2010) conducted research on the correlation between cyberbullying and traditional bullying and reported data on the online behavior of the 271 adolescents in the study. Twenty-four percent of the students reported using the Internet daily, 34% twice a week, and 34% once or twice a month. These students also reported using instant messaging; 22% every day, 38% two times a week, and 16% once or twice a month. Further 47% of the students reported texting every day and 22% reported visiting chatrooms twice a week.

In a presentation given in Washington, DC, Lenhart (2010) noted that adolescent use of the Internet is prolific. Specifically, Lenhart related that 93% of 12 to 17 year olds use the Internet extensively—up from 45% in 2004. Sixty-three percent reported daily use of the

Internet. Further, Lenhart (2010) notes that teen use of the Internet is not limited to a singular location: 89% access the Internet from home, 77% from school, 71% at friends or relatives houses, 60% at a library, and 27% use their mobile phone to access the Internet.

In a study of 545 Taiwanese students, Huang and Chou (2010) found that over 90% of the respondents had computers at home. Further, 100% of the students reported to using computers at least once a week with 28.6% reporting computer use daily. The students ranked using computers for communication second (76.7%), with entertainment ranking first place at 87%, and with academic use at 67.9%. Bauman (2010) conducted a study of the familiarity with technology and experiences with cyberbullying of 221 fifth through eighth students in rural Arizona. Noting that less than 50% of the students turned in a completed questionnaire, they found that 1.5% of the students reported cyberbullying victimization and 3% reported. She also noted that 60% of the students had a computer at home with Internet access, 48% had a cell phone, and 22% had a computer in their room.

In a multiethnic study of 265 students' cyberbullying experiences, Mark and Ratliffe (2011) found that 33% of the students reported going online daily. Bauman and Pero (2011) conducted a study about deaf and hard of hearing (HOH) students and their hearing peers in a charter school. They queried how much time each group of students spent on line and reported that deaf/HOH students spent less than an hour each day during the school week online and their hearing peers spent 1-2 hours online. Forty-one percent of Kowalski and Fedina's (2011) study participants reported spending 1-2 hours daily online. Another 24% recorded spending 3-4 hours online daily. While not reporting actual hours spent online, Walrave and Heirman (2011) reported that in their study of Belgian students that cyberbullies tended to use a computer in a study or their bedroom rather than a shared computer in a family room to cyberbully.

Mishna et al. (2012) report that of the 2,186 middle and high schools students in their study, 65.5% reported spending at least 2 hours daily on the Internet. ChildrenOnline (2012), a division of Web Safe Consulting, surveyed 2,576 students in grades 4 to 12 in Massachusetts, Virginia, New York, and Connecticut and found that 83% of the students reported they had Internet access in their bedrooms. More than 82% of the surveyed students reported that they owned a cell phone, 98.5% reported that they could text from their phone, and 67% could access the Internet from their phone. Park, Na, and Kim (2014) conducted a study of 1,200 Korean students and found a positive correlation to the amount of time spent online and the type of online behavior that adolescents engage in and cyberbullying. Because of the accessibility of electronic communication technology and the Internet to adolescents, cyberbullying has become an unfortunate and unintended aspect of the cyber world.

Table 1 shows that adolescents in the above studies spend a significant amount of time online. The time spent online implies a level of comfort using electronic communication technology. Adolescents are using instant messaging, e-mail, surfing the Internet, visiting chat rooms, gaming, and doing schoolwork when online (Berson et al., 2002; Huang & Chou, 2010; Juvenon & Gross, 2008; Lenhart, 2010; Mishna et al., 2012).

Prevalence of Cyberbullying

As noted above, adolescents are significant users of the Internet and use it for legitimate purposes such as schoolwork, social interaction with friends, sharing ideas, and photography to include videos. They also use it to bully (Dowell, Burgess, & Cavanaugh, 2009; Patchin & Hinduja, 2007). While the estimates of cyberbullying vary greatly, some researchers note that it is a growing problem (Campbell, Slee, Spears, Butler, & Kift, 2013; Vandebosch & van Cleemput, 2008). Ybarra and Mitchell (2004) found that 6% of their 1,501 respondents to the

Table 1

Adolescent Time Spent Online

Authors	Year of study	Study size	(%) Time online
Berson, Berson, & Ferron	2002	10,800	(30) 3 to 5 hours weekly (25) 6 to 9 hours weekly (15) 12 or more hours weekly (20) 2 or less hours weekly
Juvenon & Gross	2008	1,454	3+ hours weekly (average)
Huang & Chou	2010	545	(28.6) daily (100) at least weekly
Bauman & Pero	2011	30 deaf/HOH 22 hearing	(63) deaf/HOH less than 1 hr. school day (24) hearing (7) deaf/HOH 1-2 hrs. school day (38) hearing
Kowalski & Fedina	2011	42	(41) 1-2 hrs. daily (24) 3-4 hrs. daily
Lenhart	2011		(63) daily
Mark & Ratliffe	2011	265	(33) daily
Mishna, Khoury- Kassabri, Gadalla, & Daciuk	2012	685	(68.5) 2 hours weekly

Youth Internet Safety Survey (YISS) reported that they had been bullied using electronic communication technology. An additional 12% reported participating in bullying others using electronic communication technology. Five years later when the study was replicated, Wolak, Mitchell, and Finkelhor (2007) found that cyberbullying victimization had increased by 50% when 9% of the respondents reported experiencing victimization via electronic communication

technology. Jones et al. (2012) conducted the Youth Internet Safety Survey study for a third time in 2010-2011 and found that online victimization had increased in the intervening 5 years by an additional 2% to 11%.

In a study of 84 adolescents aged 13 to 18 years old, Raskauskas and Stoltz (2007) found that 21.4% of the participants indicated that they had used electronic communication technology to cyberbully while almost 49% of the students reported being the victim of electronic bullying. In the aforementioned Juvonen and Gross (2008) study, 72% of respondents reported at least one incident of cyberbullying within the preceding year with 19% of the students reporting seven or more incidents of online bullying.

In her study of 177 seventh grade students, Li (2007) found that 14.5% of the students reported that they had cyberbullied. Almost 25% of the students reported being the victims of cyberbullying. Approximately 60% of these students reported that they had been cyberbullied one to three times, with 27% of them reporting being victimized more than 10 times. Wright et al. (2009) studied 114 middle school students and found that 45.6% of them were aware of instances of cyberbullying. Almost 30% of the respondents reported being victims of cyberbullying, while 14.9% reported they had participated in cyberbullying. In a study of 7,182 adolescents to determine prevalence rates of traditional bullying and cyberbullying, Wang et al. (2009) found that 9.8% of the respondents were cyberbullied once or twice within the past couple of months. An additional 8.3% reported cyberbullying others during this same timeframe. A study of 1,211 adolescents in the Netherlands conducted by Dehue et al. in 2008 showed that 16% of the respondents had bullied others via text messages and the Internet, and 23% reported that they had been victims of cyberbullying. Gardinger, Stohmeier, and Spiel (2009) found 7.1% cyberbullying victimization in a group of 761 multi-ethnic ninth grade

students in Germany. In an online study conducted in December of 2009, Koinig et al. (2010) found that 79.3% of their 473 respondents were classified as cyberbullies. Estévez, Villardón, Calvete, Padilla, and Orue analyzed the behavior of 1,431 Spanish adolescents and reported that 30% indicated that they had been victims of cyberbullying.

Fredstrom, Adams, and Gilman (2011), in a study of the psychological impact of traditional bullying and cyberbullying, found that 27% of their 802 ninth grade participants reported experiencing cyberbullying during the year preceding the study. They further identified types of electronic communication used to cyberbully. Of the students who reported being cyberbullied, 64% were bullied via text messaging, 55.9% via phone calls, 27.5% by means of online postings, 26.4% via e-mail, 15.5% in chat rooms, and 6.7% using picture/video clips. Some of the students reported being victimized by more than one type of electronic communication technology. Twenty-one percent of Kolwalski and Fedina's (2011) ADHD and Asperger syndrome study participants reported that they were cyberbully victims within the two months prior to the study. Almost 29% of the students reported cyberbullying others. The students also reported that cyberbully activity occurred while using instant messaging (66.7%), social networking sites (60%), and text messaging (20%).

When examining prevalence rates of the participants in their study of 529 sixth, seventh, 10th, and 11th grade students, Wade and Beran (2011) found that 21.9% of the students were victims of cyberbullying, and 29.7% of the students reported participating in cyberbullying others. Walrave and Heirman (2011) conducted a study of 1,318 Belgian 12 to 18 year old adolescents and reported 34% cyberbullying victimization and that 21% of the respondents reported being cyberbullies. While performing an analysis of relationships between cyberbullying and traditional bullying of Lithuanian students, Erentaitė, Bergman, and

Žukauskienė (2012) discovered that victimization rates varied by method of cyberbullying. They reported that the following methods and percentages of cyberbullying victimization: text messages, 18%; posting clips/pictures, 8.6%; calls, 16%; chat, 13%; instant messaging, 15%; and website, 5.8%. They reported the overall cyberbullying victimization of 29%. Bauman and Pero (2011) found that deaf and HOH students were cyberbullied at 10% and their hearing peers at 14%. Cyberbullying victimization was found to be 6% for the deaf/HOH students and none of the hearing students reported that they had been cyberbullying victims.

The findings of the study conducted by Mishna et al. (2012) of sixth, seventh, 10th and 11th grade students revealed that 23.8% of the students were victims of cyberbullying, and 8% of the students reported being perpetrators of electronic bullying. Mishna et al. (2012) also noted that younger students were more likely to be victims of cyberbullying than older students.

Arslan, Savaser, Hallett, and Balci (2013) conducted a study of second, third, and fourth grade students in Turkey and found that 27% reported being cyberbully victims and 18 reported that they had been cyberbullies. O'Moore (2012), in the first major survey of cyberbullying amongst Irish adolescents, reported that 13.9% of the students in her survey were cyberbully victims and 8.6% were cyberbullies. An investigation of 696 fifth grade students in Victoria, Australia revealed that 15% of the participants in the study had been cyberbullied (Hemphill, Kotevski, Tollit, Smith, Herrenkohl, Toumbourou, & Catalano, 2012).

In a study of harassment using the Internet and mobile phones, Fenaughty and Harré (2013) found 33% of the participants had been harassed. A quarter of the students reported they had been harassed by mobile phones and almost 18% reported Internet harassment. Romero, Wiggs, Valencia, and Bauman (2013) conducted a study of 650 Latina girls in Arizona and discovered that 26% of the participants reported cyberbullying victimization and 18% reported

cyberbullying. Examining prevalence rates of cyberbullies, cyberbully victims, and students who were both bully and victim, Pettalia, Levin, and Dickinson (2013) found that 67% of the students in their study experienced cyberbullying; 17% were victims and 5% were perpetrators. Zhou, Tang, Tian, Wei, Zhang, and Morrison (2013) studied risk factors for cyberbullying with 1,438 Chinese students and reported that cyberbullying was relatively common on mainland China with almost 39% of respondents reporting cyberbullying perpetration and almost 57% reporting cyberbullying victimization.

In a 6-year longitudinal study of Korean students Jang, Song, and Kim (2014) noted an overall participation rate of 19% in cyberbullying activity. They also stated that as students aged their participation in cyberbullying decreased. Park, Na, and Kim (2014) found that 20.4% of 1,200 study participants were cyberbullies and 26% had been cyberbully victims. Examining the cyberbullying behavior of youth in Hong Kong, Wong, Chan, and Chen (2014) found that 23% of the 1,817 students had been cyberbullied within the month prior to data collection. In their meta-analysis of cyberbullying, Kowalski et al. (2014) caution about the interpretation of prevalence rates across studies because study size, methodology, country of origin, time parameter, and participant self-reporting may be factors that contribute to the differences in prevalence rates reported in research studies. Table 2 illustrates the conflicting data available on victimization and perpetration via electronic technology reported in current literature.

While there is research supporting the position that cyberbullying is a concern and the numbers of adolescents participating in this behavior is increasing, some researchers do not agree. Olweus (2012a) contends that cyberbullying is a low frequency phenomenon that has not increased in the past few years. Olweus (2013) also notes that cyberbullying should not be

Table 2

Prevalence of Cyberbullying

Authors	Year of study	Study size	% reported victimization	% reported cyberbullying
Ybarra & Mitchell	2004	1,500	6	12
Wolak, Mitchell, & Finkelhor	2007	1,500	9	-
Li	2007	177	24.9	14.5
Raskauskas & Stoltz	2007	84	48.8	21.4
Dehue, Bolman, & Völlink	2008	1,211	23	16
Juvenon & Gross	2008	454	72	-
Gardinger, Stohmeier, & Spiel	2009	761	7.1	
Wang, Iannotti, & Nansel	2009	7,182	9.8	8.3
Wright, Burnham, Inman, & Ogorchok	2009	114	29.8	14.9
Bauman	2010	221	3	1.5
König, Goldwitzer, & Steffgen	2010	473	-	79.3
Fredstrom, Adams, & Gillman	2011	802	27	-
Jones, Mitchell, & Finkelhor	2011	1,500	11	-
Popovic-Citic, Djuric, & Cvetkovic	2011	387	20	10
Wade & Beran	2012	529	21.9	29.7
Mishna, Khoury-Kassabri, & Daciuk	2012	2,186	23.8	8

Table 2 - continued

Authors	Year of study	Study size	% reported victimization	% reported cyberbullying
Hemphill, Kotevski, Tollit, Herrenkohl, & Toumbourou	2012	696	-	15
Olweus	2012	447,000	4.5	2.8
O'Moore	2012	3,004	13.9	8.6
Arslan, Savaser, Hallett, & Balci	2013	372	27	18
Campbell, Slee, Spears, Butler, & Kift	2013	3,112	-	8.9
Pettalia, Levin, & Dickinson	2013	260	17.3	5
Romero Wiggs, Valencia, & Bauman	2013	650	26	18
Zhou, Tang, Tian, Wei, Zhang, & Morrison	2013	1,438	56.8	38.8

studied in isolation. He argues that to put cyberbullying in perspective it should be studied alongside traditional bullying. Recounting an across-time (2007-2010) study of U.S. adolescents for verbal traditional bullying and cyberbullying victimization, Olweus (2012b, 2013) found prevalence rates of U.S. students to be 17.6% and 4.5%, respectively. Due to the lack of identical or comparable criteria in classification of cyberbullies and victims, prevalence rates cannot be compared evenly. He also notes that the lack of a definitive definition makes cyberbullying prevalence hard to determine across extant studies. He further notes that more systematic empirical research is needed to hone in on the many variables that constitute cyberbullying. Smith (2012) supports Olweus' contention that cyberbullying has not grown significantly during the past few years. Tokunaga in his 2010 meta-analysis of research on cyberbullying victimization noted that prevalence rates seem to be inflated due to the framing of questions that are used to determine the frequency with which subjects report cyberbullying victimization. Adding more support to this debate, Low and Espelage (2013) found in their study of 1,023 students that cyberbullying was a low frequency form of bullying.

As stated earlier, prevalence rates range from a low of 4.5% (Olweus, 2012b) to a high of 72% (Juvonen & Gross, 2008). Kowalski et al. (2014) also state that Slonge and Smith (2008) suggest that with the introduction of more types of electronic communication technology, prevalence rates are increasing. They note that Slonge and Smith (2008) suggest that with the introduction of more types of electronic communication technology, prevalence rates are increasing. Kowalski et al. (2014) contend that the inability to determine whether cyberbullying rates are increases is indelibly linked to the lack of a clear definition.

The lack of a clear definition is a barrier to comparison of prevalence rates across studies. This is also compounded by the nature and type of studies conducted. Some researchers examine

cyberbullying as a single entity while others consider each type of cyberbullying: text messaging, instant messaging, and cyberbullying via the Internet: photo and video postings, social network sites and chat rooms. Others examine only one type of cyberbullying and still others consider the medium: computer, cell phone or other electronic communication device.

Patterns in Cyberbullying

In this section, I have reviewed existing literature to examine patterns in cyberbullying. While reviewing current literature, I have found a dearth of information about minority students and how they are impacted by and/or participated in cyberbullying. Further, most extant literature does not explore specifically how environmental factors impact cyberbullying amongst minority adolescents. The patterns discussed below highlight overall adolescent participation in targeted behavior unless otherwise annotated.

Race/Ethnicity

Few of the studies reviewed document the cyberbullying activity of minority adolescents. While usually reporting the racial/ethnic composition of their studies, researchers frequently did not provide an analysis of cyberbullying experiences by race/ethnicity. Bauman (2010) conducted an exploratory study of cyberbullying with intermediate school students in Arizona. The study composition was 54% Latino, 38% White, 6% Native American, and 3% Black. The rate of cyberbully victimization was 3% and cyberbully perpetration was 1.5%. Turner et al. (2011) conducted a study of 2,999 students who participated in the 2008 National Survey of Children's Exposure to Violence. The sample was 55% White, 20% Black, 19% Hispanic, and 5% other. Examining the types and locations of cyberbullying activity on the part of adolescents during the past year, Turner et al. (2011) found that overall 2.7% of the sample had experienced cyberbullying. Other and mixed race students reported cyberbullying victimization at 4.2%,

Black students at 1.9%, and Hispanic students at 1.3%. Whites, however, experienced 3.1% victimization by electronic communication technology. Wang et al. (2009) also reported the percentage of cyberbullying by race. Black students reported the highest level of cyberbullying activity at 10.9%, Hispanic students at 9.6%, and the category of students classified as other at 7.3%. White students reported cyberbullying victimization at 6.7%.

The Kessel Schneider et al. (2012) study also addressed the cyberbullying behavior of students by race and ethnicity. The race/ethnic breakdown of the sample is as follows: 75.2% White, 12.3% mixed/other, 5.8% Hispanic, 3.9% Asian, and 2.8% Black. Kessel Schneider et al. (2012) found that 5.7% of the White students and 8.4% of the non-White students conveyed they had been cyberbullied during the previous 12 months.

Low and Espelage (2013) conducted a longitudinal study of cyberbullying and nonphysical bullying perpetration to examine perpetration rates along race and gender lines. The study was comprised of 1,023 students: 62% Black and 28% White. They hypothesized that males and African Americans would have higher levels of perpetration. Data were collected at 6-month intervals and coded into three waves. They found that African American adolescents perpetrated higher levels of cyberbullying during wave one.

I found only one study that specifically focused on cyberbullying among minority students. Abbott's (2011) dissertation focused on cyberbullying amongst college-age minority students. One hundred-seventeen college-age individuals participated in this study. The race/ethnic breakdown of the study was 64% Hispanic, 25% Asian, 9% African American, 3% Native American and 7% self-identified as biracial. Of the sample, 19% indicated they had been cyberbullied. Seven percent of the respondents indicated that they had cyberbullied another

individual. Table 3 illustrates the racial/ethnic levels of cyberbullying reported in the studies discussed above.

Gender Differences in Cyberbullying

Existing studies provide contradictory information about gender victimization in cyberbullying although most indicate that girls experience higher rates of cyberbullying victimization. Kowalski and Limber (2007) report that 15% of the girls and 7% of the boys in their study of 3,767 adolescents claimed to be victims of cyberbullying. An additional 9.5% of girls and 4% of boys also fell into the cyberbully/victim category. Dehue et al. (2008) also found that girls experienced cyberbullying victimization at a higher rate than boys. Of the 1,211 participants, 24.7% of girls and 19.1% of boys responded positively to questions about victimization via electronic communication technology. In a study of Spanish students, Ortega, Elipe, Mora-Merchán, Clamaestra, and Vega (2009) found that girls were more likely than boys to be cyberbullied using the Internet and mobile phones. König et al. (2010) found that girls (52.3%) were more likely to be perpetrators of cyberbullying than boys (47.7%). Reporting the results of a longitudinal study, Turner et al. (2011) observed that the rates of cyberbullying were higher for girls than for boys. They also observed that the rate of female cyberbullying had increased in each of the subsequent studies. In a study of Finnish adolescents, Lindflors, Kaltiala-Heino, and Rimpelä found that girls (11%) were slightly more likely to be victims of cyberbullying than boys (10%). Mark and Ratliffe's (2011) multiethnic study revealed that females were more likely to be cyberbully victims (25%) and cyberbully perpetrators (8%) than boys, 15% and 5% respectively. Like Mark and Ratliffe, Walrave and Heirman (2011) reported that girls were more likely to be cyberbully victims but found boys to be perpetrators of cyberbullying in their study of Belgian students.

Table 3

Percentage of Cyberbullying Reported by Race/Ethnicity

Authors	Year of study	Study size	White	Black	Hispanic	Asian	Other	Non-white	Overall
Wang, Iannotti, & Nansel	2009	7,182	6.7	10.9	-	-	7.3	-	
Bauman	2010	2221	38	3	54	-	6	-	
Abbott	2011	-	-	-	-	-	-	-	19
Turner, Finkelhor, Hamby, Shattuck, & Ormrod	2011	1,500	3.1	1.9	1.3	-	4.2	-	-
Moore, Huebner, & Hills	2012	855	59	28	2.6	3	-	-	
Kessel Schneider	2012	20,406	5.7	-	-	-	-	8.4	-
Hinduja & Patchin	2013	4,441	-	-	-	-	-	-	
Low & Espelage	2013	1,023	37.7	62.2	-	-	-	-	

In a study to investigate predictors of traditional bullying and cyberbullying amongst 2,326 Italian students by Brighi, Guarini, Melotti, Galli, and Genta (2012) found girls (15%) more likely to be cyberbully victims than boys (10%). Moore et al. (2012) studied 855 multirace/ethnic students and found that girls and minorities were more likely to be the victims of cyberbullying. Monks, Robinson, and Worlidge (2012) conducted a study of seven to 11-year old elementary students and found that that in their sample girls were more likely to cyberbully than boys. They also commented that there were gender differences in the methods used to cyberbully. Girls were more likely to use email and instant messaging while boys were more likely to use text messaging.

Low and Espelage (2013) found females more likely to perpetrate cyberbullying than boys in a longitudinal study of cyberbullying perpetration of White and Black students. Studying Swedish students, Beckman, Hagquist, and Hellström (2013) reported that girls (4.5%) are more likely than boys (2.6%) to be cyberbully victims and cyberbullies. In a study of rural Spanish students, Navarro et al. (2013) found that girls were more likely than boys to be victims of cyberbullying.

Wright et al. (2009), however, contradict the findings of the studies discussed above and found that boys (16%) were more likely to cyberbully than girls (14.1%). Wang et al. (2009) also found that boys (14.1%) were more likely to use electronic communication technology to bully than girls (9.7%). Another study conducted by Huang and Chou (2010) supports the supposition that boys were more likely to cyberbully than girls. In a study of 232 primary school students in Turkey, Arslan, Savaser, Hallett, and Balci (2013) reported that elementary boys were more likely to cyberbully than girls. They reported an overall perpetration rate of 18% and

cyberbullying victimization rate of 27%. Likewise, Campbell et al. (2013) found in their study of 3,112 Australian adolescents that boys (55%) were more likely to cyberbully than girls (45%).

Calvete, Orue, Estévez, Villardón, and Padilla (2010) studied 1,431 students in Spain and found that 40.3% of the girls and 47.8% of the boys reported that they had cyberbullied others. These students recounted they had posted humiliating images, recordings of physical aggression, images of physical aggression, and images of a sexual nature of classmates. Likewise, Mishna et al. (2102) also documented that boys reported higher levels of electronic bullying than girls.

Conducting a study of 269 Turkish adolescents, Aricak et al. (2008) revealed that cyberbullying victimization was present amongst Turkish adolescents. Thirteen percent of the boys and 10% of the girls self-reported as being victims of cyberbullying. Katzer, Fetchenhauer, and Belschak (2009) conducted a study of 1,700 German students to compare the victimization of adolescents in chat rooms with adolescents victimized through traditional means of bullying and found that boys are more likely to be victims of cyberbullying in chat rooms than girls. Gardinger et al. (2009) conducted a study of ninth grade student in order to determine if there were adjustment problems for youth involved in traditional bullying and cyberbullying. The study revealed that boys at 7.6% were more likely to be cyberbullies than girls at 3.1%.

Huang and Chou (2010) report that males (28%) were victimized at a higher rate than females (22%) in their study of Taiwanese students. Popovic-Citic, Djuric, and Cvetkovic (2011) conducted a study of 387 Serbian middle school students and found boys were more likely to be both cyberbullies and victims than girls. They also noted that girls' levels of cyberbullying fluctuated across the three types of cyberbullying activities they examined—harassment, denigration, and outing, while boys behavior remained constant. Chin (2011) also found in her study of 211 sixth and seventh grade students that boys were more likely to

cyberbully than girls. A 2012 longitudinal study of middle school students in Cyprus revealed that boys were more likely to be both cyberbullies and cyberbully victims (Fanti, Demetriou, & Hawa, 2012).

A 2006 study of 264 Canadian adolescents by Li indicated that 25% of the boys and 25.6% of the girls reported being victims of electronic bullying. These results indicate that there was no difference in the rate of cyberbullying based on gender. In a later study, Li (2007) contradicts these outcomes in a study that shows boys (52.2%) reporting higher levels of cyberbullying than girls (43.5%). Another Canadian study conducted by Wade and Beran (2011) found that there were no significant differences in the behavior of girls or boys for spreading rumors online, calling others names, or pretending to be someone else while online. Mitchell (2011) conducted a research study on 847 middle school students and found no overall gender difference, however, she reported that the students did show slight gender differences in the number of methods used to cyberbullying. Girls were higher at using one method to cyberbully and boys were slightly higher when using four methods to cyberbully. A number of other researchers' studies show that gender is not a factor in cyberbullying (Beran & Li, 2005; Griezel, Finger, Bodkin-Andrews, Craven, & Yeung, 2012; Hemphill et al., 2012; Kirk & Guerra, 2007; Lazuras, Barkoukis, Ourda, & Tsorbatzoudis, 2013; Menesini, Nocentini, Camodeca, 2013; Park, Na, & Kim, 2014; Patchin & Hinduja, 2008; Topçu, Erdur-Baker, & Capa-Aydin, 2008; Walrave & Heirman, 2011). Table 4 shows the percentages of cyberbullying perpetration by males and females in each study.

Kowalski et al. (2014) note that the general consensus in research on traditional bullying is that girls are more likely to participate in indirect types of aggression; cyberbullying research does not support this position. Like prevalence rates, whether boys or girls are more likely to

cyberbully differs by study highlighting yet another characteristic of cyberbullying with wide ranging reports of the proportion of students who participate in cyberbullying across the body of cyberbullying research. These studies also demonstrate that there is not consensus on whether girls or boys are more likely to be the victims or perpetrators of cyberbullying. Table 4 shows that there is a wide range in the size of the studies and degree of cyberbullying identified.

Attendance and Academic Performance

Attendance. Several researchers have found a link between cyberbullying and school attendance. Patchin and Hinduja (2006) found that 31.9% of the 384 student respondents reported that cyberbullying negatively affected them at school. This study revealed that 24.3% respondents reported skipping school and an additional 4.5% said that they were sent home from school. Beran and Li's (2005) study showed that of the 58% of the students who reported cyberbullying victimization, 17% also reported increased absenteeism after the cyberbullying experience.

There is some evidence that victims of cyberbullying may be reluctant to attend school. Katzer et al. (2009) found that students who were cyberbullied reported increased absences and truancy. Raskauskas and Stoltz (2007) discovered that of the 93% respondents who claimed that they had been cyberbullied, 26.8% stated that being cyberbullied "made me afraid to go to school" (p. 569). Conversely, Vargas et al. (2009) found that student respondents did not feel less safe at school due to cyberbullying. Marsh, McGee, Nada-Raja, and Williams, (2010) reported that their study of New Zealand adolescents revealed that students who used text messages to bully other were more likely to miss school in the prior month, especially girls.

Kessel Schneider et al. (2012) conducted a study of 20,406 adolescents in 22 high schools in Boston, MA during the fall of 2008. These schools serve primarily middle and upper-middle

Table 4

Gender Difference With Cyberbullying Perpetrators

Study	Year of study	Study size	Males (%)	Females (%)
Li	2006	264	22.3	11.6
Li	2007	177	52.2	43.5
Beran & Li	2007	432	-	-
Kowalski & Limber	2007	3,767	7	15.1
Patchin & Hinduja	2008	1,378	32.7	36.4
Dehue et al.	2008	1,211	19.1	24.7
Wright et al.	2009	470	16	14.1
Wang et al.	2009	7,182	14.1	9.7
Ang & Goh	2010	396	23.6	15.1
Koinig et al.	2010	473	47.7	53.2
Turner et al. YISS 1*	2011	1,500	6	7
Turner et al. YISS 2	2011	1,500	8	10
Turner et al. YISS 3	2011	1,500	7	15
Mitchell	2011	847	48.3	49.7
Bayar & Uçanok	2012	1,263	28.5	51.5
Hinduja & Patchin	2013	4,441	50.5	49.1
Romero Wiggs, Valencia, & Bauman	2013	650	-	100
Park, Na, & Kim	2014	1,200	51.3	48.8

*Note. YISS (Youth Internet Safety Survey)

class families. The study did not focus specifically on attendance but on what the researchers call school attachment. Using a 5-item scale from the National Longitudinal Study of Adolescent Health, Kessel Schneider et al. (2012) divided the scale scores into three tertiles—low, medium, and high. Almost eight percent (7.9%) of the students who were cyber-victims scored in the low range of school attachment. Five percent of the high school students surveyed reported high school attachment and 5.9% of the students were categorized with medium levels of school attachment. Kessel Schneider et al. (2012) also noted that students who reported both lower school performance and low school attachment were more likely to be victims of cyberbullying.

Academic performance. Researchers have also noted a link between cyberbullying and academic performance. Using data collected online from 1,388 respondents, Patchin and Hinduja (2007) sought to find out what types of behaviors students participated in as a result of being cyberbullied. Almost 64 percent (63.6%) of the respondents reported that they had earned a bad grade on an exam and that 29.7% had cheated on a school test after being cyberbullied. The respondents reported that as a result of cyberbullying, they experienced poor concentration (56%), lowered school achievement (21%), and increased absenteeism (13%). Beran and Li (2005) also noted that students experienced a drop in their grades (22%) and poor concentration (43%) after their cyberbullying experiences.

Huang and Chou's (2010) study indicated that cyberbullying victims and perpetrators did not have significant changes in their academic achievement as a result of their cyberbullying experiences. They suggest that this may, in part, be due to the strong emphasis on academics and testing in the Taiwanese culture and the high number of hours students study daily. Deeply rooted cultural expectations of high achievement coupled with intense competition for placement

in good schools may reduce the impact of cyberbullying on Taiwanese students' academic achievement. Further, in a study of life satisfaction and cyberbullying of suburban middle school students Moore et al. (2011) reported finding statistically significant associations between ethnicity and academic achievement.

In the study discussed earlier, Kessel Schneider et al. (2012) noted that of the students who cyberbullied 11.3% reported earning mostly Ds and Fs in their classes. Moore et al. (2012) found a significant correlation between cyberbullying and self-reported grades with the students in their study. In their study of Chinese high school students Zhou, Tang, Tian, Wei, Zhang, and Morrison (2013) found that students with lower academic achievement were more likely to perpetuate cyberbullying. The Arslan et al. (2013) study of Turkish primary school youth revealed that the students with low academic achievement were three times as likely to be victims of cyberbullying than those with above average academic achievement.

Age/Grade

Age/grade is another factor in adolescent participation in cyberbullying reported by researchers (Kowalski & Limber, 2007; Patchin & Hinduja, 2008; Raskauskas & Stoltz, 2007). According to Kowalski and Limber (2007) and Patchin and Hinduja (2008), the middle school years are when cyberbullying amongst adolescents is most prevalent with a significant increase in cyberbullying between sixth and eighth grades. Reporting that 48.8% of the respondents were victimized by electronic communication technology, Raskauskas and Stolz (2007) indicate that older adolescents had the highest rates of cyberbullying victimization. Wang et al. (2009) found slight variation in the rates of cyberbullying between sixth (9.4%), seventh (9.1%), and eighth (9.8%) grade students. They also noted a reduction in cyberbullying activity as students entered

higher grades. Ninth grade students reported cyberbullying activity at 8% while 10th grade students reported cyberbullying activity at 6%.

In contrast, however, Turner et al. (2011) found that cyber victimization was experienced by 2.5% of students' aged 10-13 years old and 5.6% of students aged 14-17 years old. In a study of 1,318 Belgian students, Walrave and Heirman (2011) found a slight increase of cyberbullying in older students; while Wade and Beran's (2011) study of Canadian students reported a decrease in cyberbullying in older students. Moore et al. 2011 found that 14% of their middle school students' perpetrated cyberbullying and 20% were victims of cyberbullying. When determining the impact of cyberbullying by grade level, Kessel Schneider et al. (2012) found that the rate of cyberbullying was fairly constant amongst high school students. Eleventh grade students report the highest level of cyberbullying activity at 6.7%. Students in the 10th and 12th grades reported cyberbullying at 6.3%. Freshmen reported the lowest level of cyberbullying at 6.1%.

School Cyberbullying Policies

Cyberbullying is a complicated issue and the development of school policies should be an ongoing process (Beale & Hall, 2007; Diamonduros, Down, & Jenkins, 2008). Researchers stress the importance of establishing school policies that specifically address cyberbullying (Beran & Li, 2005; Diamonduros et al., 2008; Kowalski & Limber, 2007; Patchin & Hinduja, 2007, 2008). Diamonduros et al. (2008) also strongly recommend that schools develop a comprehensive intervention plan. One major concern for state boards of education and school divisions are the guarantees for free speech in the U.S. Constitution's First and Fourth Amendments and subsequent case law related to these amendments (Poole, 2010; Willard, 2003, 2007).

Beale and Hall (2007) note the importance of creating a school environment where educators, students, and parents are made aware of the problems related cyberbullying. They further state that school boards and school divisions should address cyberbullying behavior through policy and within student codes of conduct. Additionally, Beale and Hall (2007) recommend that school divisions' acceptable use policies include specific guidelines for the use of school-owned and student-owned electronic communication technology. They also suggest that efforts to communicate the division's and school's position on cyberbullying should be a community effort to include training for faculty and staff, lessons for students, and clearly articulated methods for students to report cyberbullying activity.

Poole (2010) examined the cyberbullying policies of the Virginia public school divisions. He found that of 132 school divisions, 120 (91%) of them did not define cyberbullying within their policies but have enumerated lists that include activities that involve electronic communication. He also found that some school divisions in Virginia define how the school division will respond to off-campus cyberbullying that creates a disruption on campus. In his analysis of cyberbullying in Virginia public schools, Poole (2010) noted that 58 (44%) of school divisions required reporting of cyberbullying activity by students and/or staff. Finally, Poole (2010) noted that 106 (80%) of the state's school divisions have instituted acceptable computer use policies as required by required by state statute.

More recent research shows that school divisions and school continue to wrestle with developing policy that define cyberbullying, provide training to school personnel that provides consistency across schools. Bradshaw, Waasdorp, and O'Brennan (2013) conducted a study of teachers and educational professionals on school bullying for the National Education Association. The study revealed that teachers and educational professionals want more training

in a number of school-student issues to include cyberbullying. Overall, they felt that while many districts had policies on cyberbullying, teachers and educational professionals indicated that there was a lack of training on these policies particularly for special populations, race, gender, and religion.

Eden, Heiman, and Oleik-Shemesh (2013) conducted a study of 328 Israeli teachers about their knowledge of cyberbullying and ability to address behavior related to cyberbullying in school. The researchers found that teachers were very concerned about cyberbullying behavior and felt that policies needed to be developed and teachers needed training on managing problems that could arise in school. Further, teachers indicated that they wanted to participate in developing cyberbullying policy.

Upon reviewing the school board cyberbullying policies in Alberta, Canada, Nosworthy and Rinaldi (2013) found that of 64 school divisions only three had policies with provisions for cyberbullying. As a result of this they made nine specific recommendations to school boards which included providing a clear and explicit definition of cyberbullying, developing acceptable use agreements, training of school personnel in prevention and intervention strategies and developing system for reporting cyberbullying violations. Corcoran and McGuckin (2014) conducted research to assess Irish post-primary principals' methods for address cyberbullying in their schools. They found that 44 respondents had a policy on traditional bullying and 32 had addressed cyberbullying in the policy. Additionally, they found that the principals need support from the department of education and skills for training and support of faculty and staff.

School Environment

There is a dearth of research on the impact of school environment on cyberbullying. Kite, Gable, and Filippelli's (2010) study of 588 middle school students found 54% of the

students knew that cyberbullying behavior that occurs while at school could result in school discipline. Fifty-seven percent of the students reported that they would tell teacher, parent, or another adult that they were being cyberbullied. Festl and Quandt (2103) note that traditional bullying occurs within a stable social environment such as schools, and that cyberbullying has become a part of these social structures as students take advantage of electronic communication technology to bully. Hinduja and Patchin (2013) found that adolescents were more likely to participate in cyberbullying if their friends were involved in this behavior. They also noted that adolescents who believed that adults in their lives would punish them for cyberbullying behavior were less likely to participate in cyberbullying.

Relationship Between Bullying, Cyberbullying, and the School Environment

Few available studies have addressed the potential link between traditional bullying, cyberbullying, and the school environment. In a study of students' text bullying in New Zealand, Marsh, et al. (2010) found that students who used text messages to bully felt unsafe in schools, especially boys. Hinduja and Patchin (2013) reported finding a moderate link between cyberbullying and adolescent perception that peers, family, and school officials' likelihood to respond negatively to participating in bullying behavior may serve as a deterrent to participating in this type of behavior. They also found that students were less likely to report traditional bullying and cyberbullying activities if their parents or school officials were likely to discipline participants.

Studies of traditional bullying and cyberbullying indicate that students who participate in traditional bullying are more likely to participate in cyberbullying (Casas, Del Ray, & Ortega-Ruiz, 2012; Kowalski, Morgan, & Limber, 2012; von Marees & Peterman, 2013). Turner et al. (2011) found that students' awareness that school officials would intervene when cyberbullying

events were reported had a moderating effect on students' cyberbullying behavior. Pyzalski (2012) noted that students with poor attitudes towards school were more likely to participate in both cyberbullying and traditional bullying behaviors.

Christian Elledge et al. (2013) report that their study found that students who participate in traditional and cyberbullying behaviors are more influenced by their peers than their own individual attitudes towards victimization. They further note that classrooms where students felt their teachers would intervene to stop traditional bullying had higher levels of cyberbullying. This result hints that students might choose to participate in cyberbullying behaviors out of the presence of an adult who is likely to intervene in bullying behavior. Casas et al. (2012) found that "consistency and clarity of rules and teacher support were shown to have a spurious relationship with cyberbullying" (p. 583). Bayar and Uçanok (2012) studied student behavior in six Turkish cities and found that cyberbully victims perceived teachers more positively than cyberbullies. Kowalski et al. (2014) note that school climate, which can serve as the stage for cyberbullying activity or secondary behavior related to cyberbullying, has similar potential influence on cyberbullying as it does for traditional bullying.

Statement of the Problem

Cyberbullying is a complex issue concerning adolescent behavior. Studies into cyberbullying have resulted in conflicting conclusions amongst researchers. The literature does not illustrate consensus on gender differences in cyberbullying. Nor is there consensus on the impact of cyberbullying on school attendance and academic achievement. Review of the literature highlights that there are few studies on race/ethnicity particularly amongst students to include minority students. Similarly, the relationship between traditional bullying, cyberbullying, and the impact of the school environment warrants further study among minority

students. A study of a large national sample will highlight how minority adolescents participate in and are impacted by cyberbullying.

Purpose of the Study

Due, in part, to the relative youth of cyberbullying as a subject of adolescent aggression, most existing studies consist of local or regional samples. The purpose of this study is to examine the use of electronic communication technology by minority students to cyberbully from a national perspective. Researchers have studied victims (Huang & Chou, 2010; Raskauskas & Stoltz, 2007; Vargas et al., 2009) and perpetrators (Huang & Chou, 2010; Mishna et al., 2012). They have also examined gender differences among adolescents who cyberbully or are victims of cyberbullying (Ang & Goh, 2010; Kowalski & Limber, 2007; Li, 2006; Turner et al., 2011). Research has also been conducted to investigate the impact of cyberbullying on school attendance and grades (Beran & Li, 2005; Kessel Schneider et al., 2012). Additional studies have been conducted to examine how race/ethnicity impacts cyberbullying victimization and perpetration (Kessel Schneider et al., 2012; Turner et al., 2011). This study will examine these factors using data collected from a national sample of students.

Research Questions

Research into cyberbullying is growing but as this literature review shows, there is little consistency in the findings. Reporting of the prevalence of cyberbullying in the studies reviewed is 6% to 73%. Few studies have reported the degree to which minority students participate in or are perpetrators of cyberbullying. Research studies that are currently available offer conflicting results on whether males or females are likely to be victims, perpetrators, or both. The relationship between cyberbullying and academic performance has not been explored in any depth. Due to a dearth of knowledge about cyberbullying from a national sample of students, the

National Crime and Victimization Survey: School Crime Supplement, 2009 (U.S. Department of Justice, 2011) offers a prime opportunity to delve into these areas of concern. The questions that focus this study are:

6. Are there differences in the level of cyberbullying victimization based on race and gender?
7. Is there a relationship between the extent of cyberbullying directed toward Black victims and school attendance?
8. Are there differences in levels of cyberbullying victimization between Black students who report that their school has a published student code of conduct on cyberbullying and students who did not report that their school had a published student code of conduct on cyberbullying?
9. What is the relationship of measures of school environment to cyberbullying victimization amongst Black students?
10. Is there a relationship between earned grades and cyberbully victimization for Black students?

Study Limitations

The data collected for the National Crime Victimization Survey: Student Crime Supplement, 2009 (U.S. Department of Justice, 2011) are self-reported, and further, this study only provides data on school environmental factors as these factors are related to school security. Additionally, a number of new venues of communicating using electronic communication technology have entered the marketplace that was not available when the Department of Justice data were collected. Examples of these venues are Twitter, Ask.com, and Instagram.

CHAPTER 3. METHODOLOGY

This study of cyberbullying utilized secondary data analysis. According to McMillan and Schumacher (2006), secondary data analysis is a highly acceptable method of acquiring data sets for statistical analysis. They note a number of reasons for utilizing secondary data for systematic statistical analysis. Using secondary data saves time, is cost effective, and can be of high quality depending upon the source of the data. The Bureau of Justice Statistics and the Bureau of the Census collected the data used for analysis in this study.

Description of National Crime and Victimization Survey Data

The data analyzed for this study are from the most recent National Crime and Victimization Survey: Student Crime Supplement, collected in 2009. Below is a description of the sample size and design and method for conducting the survey.

Survey Development

The Bureau of Justice Statistics, the National Center for Education Statistics, and the U.S. Census Bureau developed the survey. The Bureau of Labor Statistics, under contract to the U.S. Census Bureau, conducted field-testing with students from local schools in the Washington, DC metropolitan area. Modifications were made based on the results of the field tests. Each year that the Student Crime Supplement has been administered, minor adjustments have been made to the questionnaire. Since the development of the 1995 version of the Student Crime Supplement, minimal field-testing was been accomplished (U.S. Department of Justice, 2009).

The final version of the survey administered in 2009 contains eight sections with questions that screen and then target environment, fighting, bullying and hate behaviors, avoidance, fear, weapons, gangs, and student characteristics. Screen questions are questions to determine if the respondent is eligible for participation in the School Crime Supplement (SCS) survey. If a prospective respondent did not meet the criteria of the screen questions he/she was not selected to participate in the study. Environmental questions solicit information about the type of school the student attends. These questions sought to identify whether the school was public or private, grade levels in the school, extracurricular activities the respondent participated in, school/classroom rules, and measures in place to promote student safety. The fighting, bullying, and hate behaviors section of the survey seeks to get detailed information about these behaviors in the school setting. The section on avoidance solicits information on the effect of fear behavior, specifically, if students stay away from school or avoid locations on school grounds. In the fear section, respondents are asked how often they fear being attacked or harmed. Questions relating to student concern about being attacked are addressed in the fear section of the questionnaire. The weapons section inquires if students brought weapons to school for personal protection. Information on gangs was queried in the gang section. The final section, student characteristics, focuses on student grades, attendance, and plans post high school (U.S. Department of Justice, 2011). This study utilized data from all sections with the exception of weapons and gangs.

Sample Design and Size

The sample design is a stratified, multistage cluster sample. The sample size for the 2009 survey was 8,986 individuals (U.S. Department of Justice, 2011).

Method of Data Collection

Data were collected from residents living throughout the United States. The initial survey collection period was January through June 2009. Using a rotating panel, the U.S. Census Bureau started interviews in January 2009. Once an adolescent was selected for participation in the study, he/she was interviewed every 6 months over a 3-year period for a total of seven interviews. The first interview was a face-to-face interview. Subsequent interviews were conducted telephonically. After the seventh interview, the respondent was rotated out of the sample and a new participant was introduced into the sample. This method of rotation is used to reduce respondent burden if they were to remain in the sample for longer than 3 years (U.S. Department of Justice, 2011).

Interviews were conducted with adolescents, aged 12-18. If the participant was 12-13 years of age and the parent refused to allow the adolescent to participate, a proxy interview was conducted with the parent. Additionally, if a respondent was absent from the household and not expected to return during the interview period, a proxy interview was conducted with the parent. Proxy interviews were administered if the adolescent was mentally or physically unable to answer survey questions due to health problems or mental incompetence and the condition(s) continued throughout the interview period. Colds, flu, and fatigue from answering survey questions were not sufficient reasons to decline to participate. If an interview could not be obtained, and one of the above conditions did not exist, a proxy interview was not allowed and the respondent was considered a noninterview. The targeted sample was 8,986 adolescents. The participation rate was 55.9% (5,023 respondents) (U.S. Department of Justice, 2011).

National Crime and Victimization Variables in Study

I selected several variables, consisting of clusters of questions, from the data set to address my research questions. These variables are: cyberbullying, school environment, age/grade, race/ethnicity, academic performance, and school attendance.

Cyberbullying. Cyberbullying is addressed by three questions in the study (Appendix A). One question queried the method of cyberbullying: social networking sites, e-mail, instant messaging, text messaging, online gaming, and exclusion from an online community. The second asks about the frequency of cyberbullying incidents and the third question asks if the student notified an adult at school about the cyberbullying incident(s).

Environment. Environment is addressed by nine questions. These questions query student relationships with their peers and teachers, knowledge of school rules and policies, classroom environment, participation in extracurricular activities, student perceptions of the teachers and other adults in the school.

Academic performance. Participants' grades are addressed by one question in the questionnaire. The question asks for the participants' overall academic performance.

School attendance. School attendance is addressed by two questions. One question asks if the student skipped any classes during the school year. The second question queries the number of days the student skipped at least one class.

Data Analysis

Descriptive statistics were run to document means, percentages, and numbers. To answer questions about differences in outcome variables by gender, race, ethnicity and age, ANOVA, *t*-tests, correlations, and regression analysis were used.

Table 5 depicts each research question, the survey question that addresses the research question, and the methodology used.

Table 5

Research Questions and Methodology

Research Question	Survey questions	Methodology
1. Are there differences in the level of cyberbullying victimization based on race and gender?	20a, 20b	ANOVA
2. Is there a relationship between the extent of cyberbullying directed toward minority victims and school attendance?	33a, 33b	Correlation
3. Are there differences in levels of cyberbullying victimization between minority students who report that their school has a published student code of conduct on cyberbullying and students who did not report that their school had a published student code of conduct on cyberbullying?	14a	<i>t</i> -test
4. What is the relationship of measures of school environment to cyberbullying victimization among Black students?	13, 14a, 14b, 15a, 15b, 16a, 16b, 16c, 16d, 18a, 18b, 20a, 21a	Correlation, Regression analysis
5. Is there a relationship between earned grades and cyberbullying victimization for Black students?	34	<i>t</i> -tests

CHAPTER 4. RESULTS

This study was performed using data from the National Crime Victimization Survey (NCVS): Student Crime Supplement (SCS), 2009. The collection of data was carried out under the authority of the U. S. Department of Justice and was collected by the U.S. Census in 2009. There were 8,986 participants in the study sample. The response rate for the study was 55.9%. Only 4,357 adolescents were surveyed about cyberbullying. Of those 4,100 provided race/ethnicity data. I elected to use data on the Black and White participants in the NCVS: SCS. The racial breakdown of the participants for my study was: White, 3,532 and Black, 568; the gender breakdown for this study was male, 2,212 and female, 2,145.

Results

Question 1. Are there differences in the level of cyberbullying victimization based on race or gender?

In order to determine if there were differences in cyberbullying based on race, I created a total cyberbullying variable that was the sum experience of the six cyberbullying methods. The individual variables were Internet, e-mail, instant messaging, text messaging, gaming, and exclusion. This total cyberbullying variable range from a low of zero to a high of six meaning that the students reported never experiencing any form of cyberbullying to reporting experiencing all six forms of cyberbullying. The mean, standard deviation, and range of the students by race are shown in Table 6.

Table 6

Cyberbullying Mean, SD, and Range by Race

Race	Mean	SD	Range	N
Black	.09	.44	5	568
White	.10	.46	5	3,532
Total	.10	.46	5	4,100

To understand if there were differences by race of student in the number of types of cyberbullying experienced, a *t*-test was conducted to compare the levels of types of cyberbullying victimization between Black and White students. There was no statistically significant difference in the means for Black students ($M = .09$, $SD = .44$) and White students ($M = .10$, $SD = .46$); $t(4098) = .39$, $p = .53$. These results suggest that Black students and White students experience roughly the same number of types of cyberbullying and that race is not a factor in cyberbullying victimization.

Crosstabulation was utilized to determine if there were differences in the proportion of students by race that were cyberbullied. Of the 568 Black students in the study, 5.6% indicated that they had experienced cyberbullying. Of the 3,532 White students in the study 6.5% indicated that they had been cyberbullied. The Chi square tests indicate there is no statistically significant difference between the proportion of Black and White students who have experienced cyberbullying, $X^2(1, n = 4,100)$, $p = .26$.

I then decided to look at the individual components to determine which types of cyberbullying students of each race were most likely to experience. In examining each of the components of the cyberbullying variable, I noted the proportion that each race experienced. Table 7 shows that Black students and White students are cyberbullied in roughly the same ways.

Further, there are no statistically significant differences between Black and White students in any of the types of cyberbullying are examined individually.

Table 7

Cyberbullying by Race and Type

Cyberbullying	% of black students who reported experiencing cyberbullying	% of white students who reported experiencing cyberbullying	Chi square	<i>p</i>
Internet	1.9	2.2	.11	.74
E-mail	1.1	1.4	.54	.46
Instant messaging	1.4	2.0	.86	.35
Text messaging	3.2	3.2	.001	.97
Gaming	.9	.7	.14	.71
Exclusion	.7	.9	.29	.59

Of the sample of 4,100 students, 260 reported being cyberbullied.

I next examined whether there were differences by gender in the total number of types of cyberbullying incidents. The mean, standard deviation, and range of the students by gender are illustrated in Table 8.

Table 8

Cyberbullying Mean, SD, and Range by Gender

Race	Mean	SD	Range	N
Female	.13	.52	5	2,145
Male	.07	.36	5	2,212
Total	.10	.45	5	4,357

A *t*-test was performed to examine the levels of types of cyberbullying between female and male students. The results of the *t*-test indicated that there is a statistically significant difference in the means for female students ($M = .13$, $SD = .07$) and male students ($M = .07$, $SD = .22$), $t(4357) = 4.10$, $p = .00$. While the *t*-test showed a statistical significance, with an eta square of .03, this difference was not meaningful.

I examined whether there were differences between the proportion of males and females who were cyberbullied; 4.9% of males reported being cyberbullied vs. 7.4% of females. The difference was statistically significant, with gender accounting for 5% of the variance $X^2(1, n = 4,357) = 11.6$, $p = .00$, $\Phi = .05$.

As with race, crosstabulation was performed to determine if there were differences by gender in the number of types of cyberbullying experienced. The results of the Chi square tests showed that there was a statistically significant difference by sex in number of types of cyberbullying victimization ($X^2(5, n = 4,357) = 19.55$, $p = .00$). Table 9 shows the percentage of cyberbullying by type. Females were three times more likely to be victims of cyberbullying victimization as males through the Internet. Further, females were twice as likely to be victims of cyberbullying victimization as males through email, instant messaging, and text messaging. Males were more likely to be victims of cyberbullying victimization via online gaming.

Table 9

Cyberbullying by Gender and Type

Cyberbullying	% Female students who reported experiencing cyberbullying	% Male students who reported experiencing cyberbullying	Chi square	<i>p</i>	phi
Internet	3.0	1.2	18.32	.00	.06
Email	2.0	0.7	14.59	.00	.06
Instant messaging	2.6	1.1	13.38	.00	.06
Text messaging	4.1	2.0	16.34	.00	.06
Gaming	0.1	1.4	23.83	.00	.07
Exclusion	0.9	0.8	.07	.80	.004

Examining race and gender differences in the proportion of students who were bullied, I found that Black males were cyberbullied least, followed by white males, then black females, and then white females.

Table 10

Proportion of Cyberbullying by Race and Gender

	Black Males	White Males	Black Females	White Females
Percent	4.7	5.1	6.7	7.8
Number	14/301	90/1768	18/267	138/1764

Question 2. Is there a relationship between the extent of cyberbullying directed toward Black victims and Black school attendance?

To determine the extent of cyberbullying and school attendance, I examined whether there was a correlation between number of classes skipped and types of cyberbullying victimization experienced by Black students. The survey asked how many days the students had skipped at least one class within the last 4 weeks. These responses were used to create a variable for school attendance. A Pearson product-moment correlation coefficient evaluated the relationship between the number of days a class was skipped and the number and types of cyberbullying victimization Black students experienced. There was no statistically significant correlation between the two variables $r = -.002$, $n = 29$, $p = .99$.

Question 3. Are there differences in levels of types of cyberbullying victimization between Black students who report that their school has a published student code of conduct on cyberbullying and Black students who did not report that their school had a published student code of conduct on cyberbullying?

Another area for exploration was the degree to which the presence of a code of conduct in schools may influence the types of cyberbullying victimization. The survey asked if the students' school took safety measures and code of conduct was one type of safety measure queried. Ninety-seven percent of the Black students in the sample reported that their school had a code of conduct.

To determine whether Black students' cyberbullying victimization was different if a code of conduct was present, a t -test was conducted examining only the Black students whose school had a code of conduct with the number of types of cyberbullying victimization they experienced. Results indicate there was no statistically significant difference in the number of cyberbullying types Black students' ($M = .09$, $SD = .44$) experienced and the presence of a code of conduct ($M = .09$, $SD = .43$), $t(1) = .88$, $p = .37$.

Question 4. What is the relationship of measures of school environment to cyberbullying victimization among Black students?

In order to determine if there was a relationship between the number of types of cyberbullying based on school environment, I created a school environment variable that was a computation of all of the nine individual environmental variables in the study questionnaire to create a summed variable. The survey asked if the school took student safety measures for nine individual variables: security guards and/or police officers, other staff/adults supervising the hallway, metal detectors, locked doors, visitor sign-in, locker checks, student picture on badge or identification, security cameras, and code of conduct. The school environment variable can range from a low of zero to a high of nine. I first examined whether or not there were differences in the number of high security school environmental variables reported by Black and White students for their schools. Results indicate that there was a statistically significant difference with Black ($M = .09$, $SD = .44$) and White ($M = .10$, $SD = .46$), $t(1) = 7.16$, $p = .000$ students reporting, on average, 9 security measures out of 9. This difference was not practically significant as the eta square was .02.

I then looked at the relationship between the measure of high school security school environment and number of types of cyberbullying types of experiences for Black students. A Pearson correlation indicated that there was no statistically significant relationship between number of security factors in the school and number of types of cyberbullying experienced by Black students ($r = .04$, $n = 431$, $p = .40$).

Question 5. Is there a relationship between earned grades and number of types of cyberbullying victimization for Black students?

This query was to determine if there was a correlation between the number of types of cyberbullying that Black students experienced and their grades. The grades variable ranges from a low of one (F) to a high of five (A). To determine if there was a relationship between grades and cyberbullying for Black students, a Pearson product-moment correlation coefficient was performed. Results indicate that there was no statistically significant correlation between grades and number of types of cyberbullying victimization for Black students, $r = -.02$, $n = 275$, $p = .72$. In addition to the questions I initially posed, I became interested in additional variables.

Question 6. Is there a relationship between Black student perceptions of teacher attitudes toward them and level of cyberbullying?

The National Crime Victimization Survey: Student Crime Supplement, 2009 included three questions about student perceptions of teacher attitudes towards students: whether students perceive that teachers care about, and whether students believe that teachers respect them, and whether students believe that their teachers say things about them that made them feel bad. They are Likert-style questions with four possible responses: *strongly agree*, *agree*, *disagree*, and *strongly disagree*. Responses range from a low of one to a high of four; responses with a higher score represent greater agreement with the questionnaire statement. There are no statistically significant relationships between the number of cyberbullying types the Black students experienced and any of the three measures of teacher attitudes toward students as reported by students: feel bad ($r = -.029$, $p = .496$), respect ($r = -.002$, $p = .996$), and care ($r = -.003$, $p = .950$).

Further, I was interested in whether Black students felt differently than White students about their perceptions of teacher attitudes. There were no statistically significant differences between black and white students among the three variables: teacher feel bad ($M = 1.92$, $SD =$

.71), $t(1) = .19$, $p = .85$, care (M = 1.73, SD = .56), $t(1) = 1.87$, $p = .061$, and respect (M = 1.79, SD = .62), $t(1) = 1.25$, $p = .22$.

Question 7. Is there a relationship between Black students who were cyberbullied and participation in extracurricular activities?

In order to determine if there is a relationship between participation in extracurricular activities and the number and types cyberbullying victimization of Black students, I created a variable consisting of the total of seven extracurricular activities: athletics, spirit groups, arts, clubs, student government, service and other. The new extracurricular variable can range from a low of zero to a high of seven meaning that the students could have reported no participation in extracurricular activities to participating in all forms of extracurricular activities that were on the survey. The mean for Black students was 1.06.

A Pearson's product-moment correlation was computed to assess the relationship between involvement in extracurricular activities and cyberbullying victimization amongst Black students. Results show there was no statistically significant difference between the two, $r = .08$, $p = .056$. When examining this relationship amongst all students who participated in extracurricular activities, a statistically significant correlation was found, $r = .07$, $n = 4,340$, $p = .00$. However, this relationship was not meaningful with extracurricular involvement accounting for less than 4% of the variance.

In summary, there was not statistically significant difference between cyberbullying victimization between Black and White students. Proportionally, Black and White students experience roughly the same types of cyberbullying victimization. A statistically significant difference was found between females and males; however, it was not a meaningful difference. Proportionally, females were more likely to experience more cyberbullying victimization than

males with White females experiencing the highest level of cyberbullying victimization and Black males the least.

Test results showed that there was no significantly different correlation between types of cyberbullying victimization of Black students and school attendance. Nor was there a statistically significant difference for Black students of the number of types of cyberbullying victimization and the presence of a code of conduct at school. A statistically significant difference was found between Black and White students' number of school safety measures in their schools, but it was not practically significant. Additionally, there was no statistically significant correlation for Black students between security measures and the number of types of cyberbullying victimization. The query of earned grades and the number of cyberbullying victimization also showed that there was no statistically significant correlation between these two variables for Black students.

When examining student perceptions of teacher attitudes, no statistically significantly relationship was found between teacher attitudes and the number of types of cyberbullying victimization of Black students. Overall, there was no statistically significant relationship between Black and White students' perception of teacher attitudes and the types of cyberbullying victimization experienced. Upon examining the correlation between Black students and their participation in extra curricular activities, no statistically significant correlation was found. There was a statistically significant relationship for Black and White students overall. This relationship, however, was not meaningful.

CHAPTER 5. DISCUSSION

In a February 25, 2014 presentation at the School of Public Health at George Washington University, Lenhart (2014) reported that as of 2011, 78% of teens have a cell phone up from 71% in 2009. Thirty-seven percent own smart phones, up from 27% in 2011, and 74% are mobile Internet users and they access the Internet most frequently from mobile devices. With this type of access to the Internet, it is not surprising that issues of inappropriate use of electronic communication technology have arisen and that cyberbullying remains a school issue of great concern. Further, results of studies continue to be mixed and sometimes contradictory.

The results of this study were interesting and surprising. Limited research was available in United States studies about differences as related to race. Test results from this study show that there was no difference in the means in the total cyberbullying variable that was created and suggests that Black students and White students experience roughly the same number of types of cyberbullying victimization. Further, there was no difference in the individual types of cyberbullying victimization experienced by Black and White students.

As noted in the literature review, there are conflicting results reported from a number of studies on the degree of cyberbullying victimization by gender. The difference in the proportion of cyberbullying victimization was found to be significant between female and male students. Almost 5% of males reported being cyberbullied as opposed to 7.4% of the females and gender accounted for 5% of the variance. Furthermore, the number and types of cyberbullying was also found to be significant. Females were three times more likely than males to be cyberbullied via the Internet and two times more likely than males to be cyberbullied through email, instant messaging, and texting. Males were more likely to be cyberbullied through online gaming.

Upon delving into other factors that might impact students who were cyberbullied, I found that attendance, grades, perception of teacher attitudes and whether the school had a code of conduct did not have an impact on cyberbullying victimization for Black students. Finally, the examination of participation in extracurricular activities for Black students and White students was not different.

The results of this study were surprising to me due to the lack of significant difference by race in cyberbullying victimization because I expected more cyberbullying victimization amongst White students. This is because of my assumption that White students would have greater access to electronic communication technology. A recent Pew Research Internet Project study by Smith (2014) sheds some light on Black students access to and use of electronic communication technology. The portion of the study that relates to my results is about the technology use of 18-29 year old Blacks and Whites. In terms of Internet use there is no difference (Blacks—98%, Whites—99%).

Blacks have a higher rate of smart phone ownership than Whites, 85% and 79% respectively. Blacks (96%) use social networking sites at a higher rate than Whites (90%). Blacks (40%) are using Twitter at a greater rate than Whites (16%). Again, the majority of these users were older than the students in this study but Smith's (2014) study shows that young Black adults are using electronic communication technology and there is no reason to believe that their younger siblings are not using it as well.

Black students are often portrayed as more aggressive and violent than White students. The results of this study show that as far as cyberbullying victimization by race is concerned, there are no differences between Black and White students. However, gender differences exist

for the proportion of victimization experienced. White females are more likely to experience cyberbullying than either Black females or Black males.

Recent data provided by the Obama administration highlights the disproportionate amount of discipline experienced by Black students; this makes me question if Black students are referred more often than White students for cyberbullying infractions. Examination of the behavior of Black and White students in this one area begs exploration into other types of student behavior—similar patterns may be revealed.

Law, Shapka, Hymel, Olson, and Waterhouse (2012) found that students in their study acknowledged the particular type or mode of cyberbullying they participated in but did not necessarily identify themselves in the role of a cyberbully. This brings up the question of how researchers define cyberbullying behavior in their surveys and how adolescents perceive their own cyberbullying activity. Further research is needed to understand how adolescents relate their own cyberbullying activity to the emerging research concept of cyberbullying. The way researchers conceptualize cyberbullying may not be the same as the way adolescents view cyberbullying behavior.

Another concern when thinking about the behavior of adolescents online is the idea of *netiquette* or online etiquette—what behaviors are acceptable or unacceptable in the online world. A recent study by Park, Na, and Kim (2014) focused on netiquette with 1,200 Korean students. They note that understanding netiquette helps to shape adolescent behavior when online. Adolescent understanding of online netiquette and the consequences of negative online behavior is another area of limited study that should be explored.

As noted in the introduction to this dissertation, the media has played an important role in defining what is considered cyberbullying. Sabella, Patchin, and Hinduja (2013) felt it was

important to debunk claims about cyberbullying that “are being fueled by media headlines and unsubstantiated public declarations” (p. 2703). Their goal was to determine the accuracy of commonly held beliefs about cyberbullying. They examined available empirical research to dispel myths fostered by the media and other public declarations about cyberbullying in order to promote an understanding of research-based data about cyberbullying amongst educators, policymakers and youth advocates. They also used this data to offer recommendations for prevention of cyberbullying behavior. Additionally, as cyberbullying, in general, and cyberbully victimization, specifically, is studied more widely, questionnaires and surveys should consider quantifying what is meant by cyberbullying. This includes clearer descriptions of cyberbullying behavior, frequency, and length of time between incidents.

Relationship to Literature on Cyberbullying

Mindful of Sabella et al. (2014) and their desire to debunk myths related to cyberbullying, I revisited some parts of the literature as it relates to my study. In this study, I did not find a difference between Black and White students who were cyberbullying victims. There is a paucity of research on cyberbullying that is reported by race. In their study of school bullying in the United States, Wang et al. (2009) found that Black adolescents were more likely to be involved in both traditional bullying and cyberbullying. They also note that socioeconomic level impacts cyberbullying activity. They further state that parental involvement has been shown to reduce the level of cyberbullying activity in adolescents. Low and Espelage (2012) conducted a study that examined the differences in cyberbullying by race, individual, and family characteristics that might predict the potential for cyberbullying behavior. The researchers hypothesized that cyberbullying would be higher for Black youths because earlier nationally representative studies showed that Blacks participate in higher levels of violence. Upon

completion of their study, Low and Espelage (2012) reported that when combined with the variables of family violence, alcohol and drug use, and low levels of parental monitoring Black youth's cyberbullied at higher rates than Whites. Their results were contrary to the results found in this study.

Results of existing studies do not show a specific trend in cyberbullying victimization (e.g., girls are more likely to be victims than boys or vice versa). Some studies report that females are more likely to be the victims of cyberbullying while others report that males are more likely to be victims. Some intriguing results come from studies in which the researcher examined specific methods of cyberbullying. Katzer et al. (2009) noted that boys were more likely to be victimized in chat rooms. Popovic-Citi et al. (2011) reported that female behavior fluctuates across three methods of cyberbullying—harassment, denigration, and outing—but male behavior remained constant across these behaviors. Monk et al. (2012) noted that girls were more likely to cyberbully via email and instant messaging and while boys used texting. Another study that reported the method of cyberbullying was Arslan et al. (2013). Their study revealed that male primary school students were more likely to be cyberbullied via email, chat rooms, and instant messaging tools (Facebook and Twitter) while girls were victimized via the telephone. I found that like Monk et al. (2012) females in this study were twice as likely as males to be cyberbullied via email and instant messaging. Unlike Monk et al. (2012), females in this study were also two times as likely to be cyberbullied through text messaging than males. Further, females were three times more likely to be cyberbullied via the Internet. I found that males were more likely to be victimized while participating in online gaming. These results do not reduce the need to understand overall gender victimization rates, however, an even deeper understanding of

cyberbullying victimization can take place when research drills deep and link specific methods to gender.

Although no relationship between grades and cyberbullying victimization of Black students was found by this study, researchers have provided information from several perspectives on grades and cyberbullying. For example, Zhou et al. (2013) reported that students with lower academic achievement are more likely to perpetrate cyberbullying. Further, Arslan et al. (2013) noted that the victims of cyberbullying were three times more likely to perpetrate cyberbullying than students who have not been cyberbullied and Kessel Schnieder (2012) noted that 11% of the participants reported earning D's and F's in the wake of cyberbullying victimization.

While the absence of a relationship between school attendance and cyberbullying victimization of Black students was found in this study, earlier studies contradict these findings. Li (2005) and Beran and Li's (2005) reported that victims in these studies had increased absenteeism after being cyberbullied. Patchin and Hinduja (2006) and Marsh et al. (2010) reported that cyberbullying negatively impacted students through increased absenteeism. Ybarra et al. (2007) noted that students who were cyberbullied were more likely to report two or more detentions or suspensions, and skipping school than students who were not cyberbullied. Kowalski and Limber (2013) also found a correlation between cyberbullying, cyberbullying victimization, and school attendance. They caution that these are correlational relationships not causal relationships and that further research that combines traditional bullying and cyberbullying are needed to understand the relationship between the two types of bullying and school variables.

Two of the variables tested in my study have a role in school environment. One is whether the school has a code of conduct. In this study the presence of a code of conduct did not indicate a difference with Black students and cyberbullying. However, studies on school policies in general support the idea of having strong policies on cyberbullying. Beale and Hall (2007) advocate openness and honesty about the cyberbullying behavior concerns of the school and community. They advocate the discussion of concerns surrounding cyberbullying and the development of policies and procedures that address issues of discipline and school. These policies should include acceptable use policies for school- and student-owned electronic communication technology. Bradshaw et al. (2013) and Eden et al. (2013) conducted studies of school faculty and educational support personnel and found that these members of the school community are very concerned about cyberbullying. These studies report that faculty and staff do not feel trained in identifying and addressing issues surrounding cyberbullying. Further, school personnel want to participate in the development of cyberbullying policies and expressed a need for professional development that will facilitate the implementation of these policies.

The second group of features is overall school environmental factors. In this study, school security measures were used to examine whether there was a relationship between cyberbullying victimization and the school environment of Black students. Randa (2013) used the same data source used in this study, The National Crime and Victimization Survey—School Crime Supplement (2009), to examine gender, race, socioeconomics, school security features, as well as gang activity, features of school policies, and fear of victimization. Results showed a positive and significant connection between these variables and fear of victimization and a disorderly school environment. Additional research into the features of school environment would aid in developing a greater understanding of how the physicality of schools fit into the

overall picture of cyberbullying victimization. In their study, Festl and Quandt (2013) selected the school environment because they felt that school environment is the relevant to adolescent behavior, even adolescent online behavior.

Implications for Research

Cyberbullying is a complex behavior. This study focused on the experiences of Black students who were victims of cyberbullying and factors that may have a relationship to cyber victimization experienced by Black students. Venues that were not available in 2009 have changed the cyber landscape in terms of their potential for use in cyberbullying. Below are a few areas of cyberbullying research that requires further study.

Definitional issues combined with study design remain problematic because it makes comparative analyses across studies difficult. Descriptive elements have been added to flesh out the definition of cyberbullying: overt and intentional (Mitchell, 2004); repeated (Beran & Li, 2005); willful and repeated, Patchin and Hinduja (2006); insult or threaten, (Juvonen & Gross, 2008); and willful (Ang & Goh, 2010). Fairly early in the research of cyberbullying Willard (2007) categorizes cyberbullying into eight classifications that have been used in a number of studies. Kowalski et al. (2014) tackles this issue in their meta-analysis noting that there is a lack of consensus about the specific constraints used to define cyberbullying and that this hinders the ability to determine the prevalence of cyberbullying activity. The one thing agreed upon is that is that cyberbullying is accomplished via use of electronic communication technology and the Internet.

The concept of power in online bullying is perceived by some researchers as problematic; however, other researchers relate power to an adolescent's knowledge and ability to navigate the cyber world. Kowalski, et al. 2014 note that the concept of power needs to be examined in future

research through the design of new measures to determine if power defined as technological agility is a factor in cyberbullying. Further, they recommend that the other two components used to define cyberbullying—intentionality and repetitiveness— be examined systematically to determine if they are factors in cyberbullying.

Video gaming is a large part of some adolescents' online activities and we do not have an understanding of how this impacts student cyberbullying behavior. A recent qualitative study on video violent gaming by Dittrick, Beran, Mishna, Hetherington, and Shariff (2013) has opened the door for exploration of the relationship between cyberbullying and adolescent participation in violent video gaming amongst Canadian students. In this study, Dittrick et al. (2013) report that students who cyberbully are likely to prefer violent video games. Replication of this study with American students and conducting a qualitative study are ways to extend the understanding of the relationship between cyberbullying and violent video gaming.

One of the aims of the Kowalski et al. (2014) meta-analysis was to identify gaps in current studies. A few of their recommendations follow. They recommend more empirical study of the role of personality in the predicting of cyberbullying and victimization. Along with Olweus (2013), Kowalski et al. (2014) recommend more studies that combine traditional bullying and cyberbullying and perpetration and victimization in order to examine any relationships that may exist between these variables. Finally, I would like to note that they expressed the need for researchers to focus efforts on studies of cyberbullying that provide direction for school leaders in developing intervention and prevention programs in schools and, merely, for the sake of research.

Implications for Policy and Practice in Schools

The results of this study serve to inform policy and practice in schools. School divisions should develop policies that address the full scope of cyberbullying behavior but also allows opportunities for intervention activities. Policies developed by school boards should contain provisions to educate administrators, faculty and staff, students and parents, and the community. Intervention should also be addressed by district policies. District-wide prevention programs should be developed or purchased and implemented with fidelity. Additionally, these prevention programs should have periodic assessments to determine if the program is effective.

At the school level, counselors should take the lead in working to develop and teach lessons in classrooms about the nature and extent of cyberbullying, online behaviors that reduces the risk of victimization, and addresses prevention of cyberbullying activity. Further, counselors should work with administration to develop a cyberbullying reporting system. Finally, the community should to acknowledge that cyberbullying cannot be resolved through the actions of districts and schools alone. This is a problem that requires the collaboration of community organizations, including the school district.

Kowalski and Limber (2014) note that due to variability in results of studies of cyberbullying, school officials, parents, and community leaders need to recognize that cyberbullying intervention and prevention efforts will not be a one size fits all solution. Flexibility should be built into these programs so that they can be adjusted to the needs of the population. Randa (2013) states that schools should also consider the off-line consequences of online behavior in their policy deliberations. These discussions should include the consideration of limiting student access to social networking sites and whether to restrict students' access to their Internet capable personal devices.

Limitations of Study

The questionnaire used in the study needs to be expanded for exploring the online behavior of students. While it queries types of cyberbullying—Internet, text messaging, instant messaging, gaming, and exclusion—examining the specific channels used to cyberbully could provide additional insight on adolescent cyberbullying behavior. Students have an ever-increasing array of mediums to use to cyberbully. Schryver (2013) highlights popular websites and apps used by adolescents: Twitter, Instagram, Snapchat (time limits set by users may mask cyberbullying activity from adults), Tumblr (this app has established a reputation for users to post porn), Google+, Vine (app allows students to post six second video clips; site contains inappropriate videos), and Ask.fm (adolescents may ask and answer questions anonymously). While Facebook continues to be a favorite, adolescents have a number of additional options to cyberbully, many of which adults may be unaware.

LIST OF REFERENCES

LIST OF REFERENCES

- Abbott, M. K. (2011). *Cyberbullying experiences of ethnic minorities* (Doctoral dissertation). Available from ProQuest Dissertations and Theses databas. (UMI No. 897676851).
- Ang, R. P., & Goh, D. H. (2010). Cyberbullying among adolescents: The role of affective and cognitive empathy, and gender. *Child Psychiatry & Human Development*, 41, 387-397.
- Aricak, T., Siyhhan, S., Uzunhasanoglu, A., Saribeyoglu, S., Ciplak, S., Yilmaz, N., & Memmedov, C. (2008). Cyberbullying among Turkish youth. *CyberPsychology & Behavior* 11(3), 253-261.
- Arslan, S., Savaser, S., Hallett, V., and Balci, S. (2013). Cyberbullying among primary school students in Turkey: Self-reported prevalence and associations with home and school life. *Cyberpsychology, Behavior, and Social Networking*, 15(10), 527-533.
- Bauman, S. (2010). Cyberbullying in a rural intermediate school: An exploratory study. *Journal of Early Adolescence*, 30, 803-833. doi: 10.1177/0272431609350127.
- Bauman, S. & Pero, H. (2011). Bullying and cyberbullying among deaf students and their hearing peers: An exploratory study. *Journal of Deaf Studies and Deaf Education*, 16, 236-253. doi: 10.1093/deafed/enq043.
- Bayar, Y. & Uçanok, Z. (2012). School Climate and generalized peer perception in traditional and cyberbullying status. *Educational Sciences: Theory and Practice*, 105(6), 442-455.
- Beale, A. V., & Hall, K. R. (2007). Cyberbullying: What school administrators (and parents) can do. *The Clearing House* 81(1), 8-12.

- Beckman, L., Hagquist, C., & Hellström, L. (2013). Discrepant gender patterns for cyberbullying and traditional bullying—An analysis of Swedish adolescent data. *Computers in Human Behavior*, 29, 1896-1903.
- Beran, T. & Li, Q. (2005). Cyber-harassment: A study of a new method for an old behavior. *Journal of Educational Computing Research*, 32(3), 265-277.
- Berson, R. I., Berson, M. J., & Ferron, J. M. (2002). Emerging risks of violence in the digital age: Lessons for educators from an online study of adolescent girls in the United States. *Journal of School Violence*, 1(2), 51-71.
- Bouhnik, D. & Mor, D. (2014). Gender differences in the moral judgment and behavior of Israeli adolescents in the internet environment. *Journal of the Association for Information Science and Technology*, 65(3), 551-559). doi: 10.1002/asl.22979.
- Bradshaw, C. P., Waasdorp, T. E., & O'Brennan, L. M. (2013). Teachers' and education support professionals' perspectives on bullying prevention: Findings from a National Education Association Study. *School Psychology Review*, 42(3), 280-297.
- Brighi, A., Guarini, A., Melotti, G., Galli, S., & Genta, M. L. (2012). Predictors of victimization across direct bullying, indirect bullying, and cyberbullying. *Emotional and Behavioral Difficulties*, 17(3-4), 375-388.
- Brooks, M. (2012, May 16). R UR kids bully-proof? *Michigan Chronicle*, 75(36), 6.
- Calvete, E., Orue, I., Estévez, A., Villardón, L., & Padilla, P. (2010) Cyberbullying in adolescents: Modalities and aggressors' profile. *Computers in Human Behavior*, 26, 1128-1135.
- Estévez, A., Villardón, L., Calvete, E., & Orue, I. (2010). Adolescent victims of cyberbullying: Prevalence and characteristics. *Behavioral Psychology*, 18, 73-89.

- Campbell, M. A., Slee, P. T., Spears, B., Butler, D., & Kift, S. (2013). Do cyberbullies suffer to? Cyberbullies' perceptions of the harm they cause to other and to their own mental health. *School Psychology International*, 34(6), 613-629.
- Casas, J. A., Del Rey, R., Ortega-Ruiz, R. (2012). Bullying and cyberbullying: Convergent and divergent predictor variables, *Computers in Human Behavior* 29(3), 580-587.
doi:<http://dx.doi.org/10.1016/j.chb.2012.11.015>
- Cassidy, W., Jackson, M., & Brown, K. N. (2009). Sticks and stones can break my bones, but how can pixels hurt me? Students' experiences with cyber-bullying. *School Psychology International*, 30, 383-401. doi:10.177/0143034309106948
- ChildrenOnline. (2012). *2010-2011 Research on the Internet and cell phone behavior of students*. Retrieved from <http://childrenonline.org/research.html>
- Chin, M. A. (2011). *Prevalence, gender differences, and mental health problems associated with traditional and cyber bullying*. (Order No. 1496158, University of Hawai'i at Hilo). *ProQuest Dissertations and Theses*, 59. Retrieved from <http://search.proquest.com/docview/876089730?accountid=14780>. (876089730).
- Christian Elledge, L., Williford, A., Boulton, A. J., Depaolis, K. J., Little, T. D., & Salmivalli, C. (2013). Individual and contextual predictors of cyberbullying: The influence of children's provictim attitudes and teachers' ability to intervene. *Journal of Youth and Adolescence*, 42(5), 698-710. doi:<http://dx.doi.org/10.1007/s10964-013-9920-x>
- Corcoran, L. & McGurkin, C. (2014). Addressing bullying problems in Irish school and in cyberspace: a challenge for school management. *Education Research*, 56(1), 48-64.
- David-Ferdon, C., & Feldman, M. (2007). Electronic media, violence, and adolescents: An emerging public health problem. *Journal of Adolescent Health*, 41, S1-S5.

- Dehue, F., Bolman, C., & Völlink, T. (2008). Cyberbullying: Youngsters' experiences and parental perception. *CyberPsychology & Behavior*, 11(2), 217-223.
- DeLara, E. W. (2008). Developing a philosophy about bullying and sexual harassment: Cognitive coping strategies among high school students. *Journal of School Violence*, 7(4), 72-96.
- Diamanduros, T., Downs, E., & Jenkins, S. J. (2008). The role of school psychologists in the assessment, prevention, and intervention of cyberbullying. *Psychology in the Schools*, 45, 693-704.
- Dowell, E. B., Burgess, A. W., & Cavanaugh. (2009). Clustering of Internet risk behaviors in a middle school student population. *Journal of School Health*, 45(11), 547-553.
- Eden, S., Heiman, T., and Oleik-Shemesh, D. (2013). Teachers' perceptions, beliefs and concerns about cyberbullying. *British Journal of Educational Technology*, 44(6), 1036-1052. doi: 10.1111/j.1467.2012.01363.x.
- Erdur-Baker, Ö. (2010). Cyberbullying and its correlation to traditional bullying, gender, and frequent and risky usage of internet-mediated communication tools. *New Media & Society*, 12, 109-125. doi: 10.1177/1462444809341260.
- Erentait, R., Bergman, L. R., & Žukauskienė, R. (2012). Cross Contextual stability of bullying victimization: A person-oriented analysis of cyber and traditional bullying experiences among adolescents. *Scandinavian Journal of Psychology* 53, 181-190. doi: 10.1111/j.1467-9450.2011.00935.x.
- Fanti, K. A., Demetrious, A. G., & Hawa, V. V. (2012). A longitudinal study of cyberbullying: Examining risk and protective factors. *European Journal of Developmental Psychology*, 9, 168-181. doi: 10.1080/17405629.2011.643169.

- Festl, R. & Quandt, T. (2013). Social relations and cyberbullying: The influence of individual and structural attributes on victimization and perpetration via the Internet. *Human Communication Research, 39*, 101-126.
- Fredstrom, B. K., Adams, R. E., & Gilman, R. (2011). Electronic and school-based victimization: Unique contexts for adjustment difficulties during adolescence. *Journal of Youth and Adolescence, 40*, 405-415.
- Frisen, A., Jonsson, A., & Persson, C. (2007). Adolescents' perception of bullying: Who is the victim? Who is the bully? What can be done to stop bullying? *Adolescence, 42*(168), 749-761.
- Grading, P., Strohmeier, D., & Spiel, C. (2009). Traditional bullying and cyberbullying: Identification of risk groups for adjustment problems. *Journal of Psychology, 217*, 205-213. doi: 10.1027/0044-3409.217.4.205.
- Griezel, L., Finger, L. R., Bodkin-Andrews, G. H., Craven, R. G., & Yeung, A. S. (2012). Uncovering the structure of and gender developmental differences in cyber bullying. *The Journal of Educational Research, 105* 442-445.
- Hemphill, S. A., Kotevski, A., Tollit, M., Smith, R., Herrenkohl, T. I., Toumbourou, J. W., & Catalano, R. F. (2012). Longitudinal predictors of cyber and traditional bullying in Australian secondary school students. *Journal of Adolescent Health, 51*, 59-65. doi: 10.1016/j.jadohealth.2011.11.019.
- Hinduja, S., & Patchin, J. W. (2013). Social influences on cyberbullying behaviors among middle and high school students. *Journal of Youth and Adolescence, 42*(5), 711-722. doi:<http://dx.doi.org/10.1007/s10964-012-9902-4>

- Huang, Y., & Chou, C. (2010). Analysis of multiple factors of cyberbullying among junior high school students in Taiwan. *Computers in Human Behavior*, 26, 1581-1590.
- Hussar, W. J., & Bailey, T. M. (2013). Projection of education statistics to 2022 (NCES 2014-051). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Jang, H., Song, J., & Kim, R. (2014). Does the offline bully-victimization influence cyberbullying behavior among youths? Application of general strain theory. *Computers in Human Behavior*, 31, 85-93.
- Jones, M. J., Mitchell, K. J., & Finkelhor, D. (2012). Trends in youth Internet victimization: Findings from three youth Internet safety surveys 2000-2010. *Journal of Adolescent Health*, 50, 178-186.
- Juvonen, J., & Gross, E. F. (2008). Extending the school ground? Bullying experiences in cyberspace. *The Journal of School Health*, 78(9), 496-505. doi: 10.1111/j.1746-1561.2008.00335
- Katzer, C., Fetchenhauer, D., & Belschak, F. (2009). Cyberbullying: Who are the victims? A comparison of victimization in Internet chatrooms and victimization in school. *Journal of Media Psychology*, 21, 25-36.
- Kessel Schneider, S., O'Donnell, L., Stueve, A., & Coulter, R. W. S. (2012). Cyberbullying, school bullying, and psychological distress: A regional census of high school students. *American Journal of Public Health*, 102(1), 171-177.
- Kirk, R. W. & Guerra, N. G. (2007). Prevalence and predictors of Internet bullying. *Journal of Adolescent Health*, 41, S14-S21.

- Kite, S. L., Gable, R., & Filippelli, L. (2010). Assessing middle school students' knowledge of conduct and consequences and their behaviors regarding the use of social networking sites. *The Clearing House*, 83, 158-163. doi: 10.1080/00098650903505365
- Koinig, A., Gollwitzer, M., & Steffgen, G. (2010). Cyberbullying as an act of revenge? *Australian Journal of Guidance & Counseling*, 20(2), 210-224.
- Kowlaski, R. M. & Fedina, C. (2011). Cyber bullying in ADHD and Asperger syndrome populations. *Research in Autism Spectrum Disorders*, 5, 1201-1208. doi: 10.1016/j.rasd.2011.01.007.
- Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014, February 10). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin*. Advance online publication. <http://dx.org/10.1037/a0035618>
- Kowalski, R. M., & Limber, S. P. (2007). Electronic bullying among middle school students. *Journal of Adolescent Health*, 41, S22-S30.
- Kowalski, R. M., & Limber, S. P. (2013). Psychological, physical, and academic correlates of cyberbullying and traditional bullying. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 53(1), S13-S20. doi:<http://dx.doi.org/10.1016/j.jadohealth.2012.09.018>
- Kowalski, R. M., Morgan, C. A., & Limber, S. P. (2012). Traditional bullying as a potential warning sign of cyberbullying. *School Psychology International*, 33(5), 505-519. doi:<http://dx.doi.org/10.1177/0143034312445244>

- Law, D. M., Shapka, J. D., Hymel, S., Olson, B. F., & Waterhouse, T. (2012). The changing face of bullying: An empirical comparison between traditional and internet bullying and victimization. *Computers in Human Behavior*, 28, 226-232.
- Lazuras, L., Barkoukis, V., Ourda, D., & Tsorbatzoudis, H. (2013). A process model of cyberbullying in adolescence. *Computers in Human Behavior*, 29, 881-887.
- Lenhart, A. (2010, May). *Cyberbullying: What the research is telling us*. Retrieved from Pew Research Internet Project and American Life Project website:
<http://www.pewInternet.org/Presentations/2010/May/Cyberbullying-2010.aspx>
- Lenhart, A. (2014, February). Teens and technology: Understanding the digital landscape. Retrieved from Pew Research Internet Project website:
<http://www.pewinternet.org/2014/02/25/teens-technology-understanding-the-digital-landscape/>
- Li, Q. (2006). Cyberbullying in schools: A research of gender differences. *School Psychology International*, 27, 157-170.
- Li, Q. (2007). New bottle but old wine: A research of cyberbullying in schools. *Computers in Human Behavior*, 23, 1773-1791.
- Lindfors, P. L., Kaltiala-Heino, R., & Rimpelä, A. H. (2012). Cyberbullying among Finnish adolescents—a population-based study. *BioMed Central Public Health*, 12, 1027.
doi:<http://dx.doi.org/10.1186/1471-2458-12-1027>
- Low, S. & Espelage, D. (2013). Differentiating cyber bullying perpetration from non-physical bullying: Commonalities across race, individual, and family predictors. *Psychology of Violence*, 3(1). 39-52. doi: 10.1037/a0030308.

- Mark, L. & Ratliffe, K. T. (2011). Cyber worlds: New playgrounds for bullying. *Computers in Schools*, 28, 92-116.
- Mason, K. L. (2008). Cyberbullying: A preliminary assessment for school personnel. *Psychology in Schools*, 45, 323-346.
- Marsh, L., McGee, R., Nada-Raja, S., & Williams, S. (2010). Brief report: Text bullying and traditional bullying among New Zealand secondary school students . *Journal of Adolescence* 33, 237–240. doi: 10.1016/j.adolescence.2009.06.001.
- McMillan, J. H., & Schumacher, S. (2006). *Research in education: Evidence-based inquiry*. Boston, MA: Person Education, Inc.
- Menesini, E., Nocentini, A., & Camodeca, M. (2013). Morality, values, traditional bullying, and cyberbullying in adolescence. *British Journal of Developmental Psychology*, 31, 1-14.
- Mishna, F., Khoury-Kassabri, M., Gadalla, T., & Daciuk, J. (2012). *Risk factors for involvement in cyber bullying: Victims, bullies, and bully-victims. Children and Youth Services Review*, 34, 63-70.
- Mitchell, M. S. (2011). Cyberbullying and academic achievement: Research into the rates of incidence, knowledge of consequences, and behavioral patterns of cyberbullying. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database.
- Monks, C. P., Robinson, S., & Worlidge, P. (2012). The emergence of cyberbullying: A survey of primary school pupil's perceptions and experiences. *School Psychology International*, 33(5), 477-491.
- Moore, P. M., Huebner, E. S., & Hills, K. J. (2011). Electronic bullying and victimization and life satisfaction in middle school students. *Social Indicators Research*, 107(3), 429-447. doi: 10.1007/s11205-011-9856-z.

- Navarro, R., Serna, C., Martínez, V., & Ruiz-Oliva, R. (2013). The role of internet use and parental mediation on cyberbullying victimization among Spanish children from rural public schools. *European Journal of Psychology Education, 28*, 725-745. doi: 10.1007/s10212-012-0137-2
- Nosworthy, M. & Rinaldi, C. (2013). A review of school board cyberbullying policies in Alberta. *Alberta Journal of Educational Research, 58*(4), 509-525.
- Ortega, R., Elipe, P., Mora-Merchán, J. A., Clamaestra, J., and Vega, E. (2009). The emotional impact of traditional bullying and cyberbullying: A study of Spanish adolescents. *Journal of Psychology, 217*(4), 197-204.
- Olweus, D. (2012a). Comments on cyberbullying article: A rejoinder. *European Journal of Developmental Psychology, 9*(5), 559-568.
- Olweus, D. (2012b). Cyberbullying: An overrated phenomenon? *European Journal of Developmental Psychology, 9*(5), 520-538.
- Olweus, D. (2013). School bullying: Development and some important challenges. *Annual Review of Clinical Psychology, 9*, 751-780. doi: 10.1146/annurev.clinpsy-050212-185516.
- O'Moore, M. (2012). Cyber-bullying: The situation in Ireland. *Pastoral Care in Education, 30*(3), 209-223.
- Patchin, J. W., & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look at cyberbullying. *Youth Violence and Juvenile Justice, 4*, 148-169.
- Patchin, J. W., & Hinduja, S. (2007). Offline consequences of online victimization: School violence and delinquency. *Journal of School Violence, 6*(3), 89-112.

- Patchin, J. W., & Hinduja, S. (2008). Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant Behavior*, 29(2), 129-156.
- Patchin, J. W., & Hinduja, S. (2010). Cyberbullying and self-esteem. *The Journal of School Health*, 80(12), 614.
- Perren, S., Dooley, J., Shaw, T., & Cross, D. (2010). Bullying in school and cyberspace: Associations with depressive symptoms in Swiss and Australian students. *Child and Adolescent Psychiatry & Mental Health*, 4(28), 1-10.
- Perren, S & Gutzwiller-Helfenfinger. (2012). Cyberbullying and traditional bullying in adolescence: Differential roles of moral disengagement, moral emotions, and moral values. *European Journal of Developmental Psychology*, 9(2), 195-209.
- Pettalia, J. L., Levin, E., & Dickinson, J. (2013). Cyberbullying: Eliciting harm without consequence. *Computers in Human Behavior*, 29, 2758-2765.
- Pieschl, S., Porsch, T., Kahl, T., & Klockenbasch, R. (2013). Relevant dimensions of cyberbullying—results from two experiments. *Journal of Applied Developmental Psychology*, 34, 241-252.
- Poole, G. W. (2010). *An analysis of cyberbullying policies in Virginia public school districts* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 1032549009).
- Popovic-Citic, B., Djuric, S., & Cvetkovic, V. (2011). The prevalence of cyberbullying among adolescents: A case study of middle schools in Serbia. *School Psychology International*, 32(4), 412-422.
- Pyzalski, J. (2012). From cyberbullying to electronic aggression: Typology of the phenomenon. *Emotional & Behavioural Difficulties*, 17(3), 13.

- Park, S., Na, E., & Kim, E. (2014). The relationship between online activities, netiquette and cyberbullying. *Children and Youth Services Review*. (Accepted manuscript). doi: 10.1016/j.chilyouth.2014.04.002
- Randa, R. (2013). The influence of the cyber-social environment on fear of victimization: Cyberbullying and school. *Security Journal*, 26(4), 331-348. doi: 10.1057/sj.2013.22.
- Raskauskas, J. & Stoltz, A. D. (2007). Involvement in traditional and electronic bullying among adolescents. *Developmental Psychology*, 43(5), 564-575.
- Romero, A. J., Wiggs, C. B., Valencia, C., & Bauman, S. (2013). Latina teen suicide and bullying. *Hispanic Journal of Behavioral Sciences*, 35(2), 159-173.
- Sabella, R. A., Patchin, J. W., & Hinduja, S. (2013). Cyberbullying myths and realities. *Computers in Human Behavior*, 29(6), 2703-2711. doi: <http://dx.doi.org/10.1016/j.chb.2013.06.040>
- Schryver, K. (2013, September). Sites and apps kids are heading to after Facebook. *Common Sense Media*. Retrieved from http://www.huffingtonpost.com/common-sense-media/11-sites-and-apps-kids-are-heading-to-after-facebook_b_3991614.html
- Slonje, R. & Smith, P. K. (2008). Cyberbullying: Another main type of bullying? *Scandinavian Journal of Psychology*, 49, 147-154.
- Smith, A. (2014). *African Americans and technology use*. Retrieved from Pew Research Internet Project website: <http://www.pewinternet.org/2014/01/06/african-americans-and-technology-use/>
- Smith, P. K. (2102). Cyberbullying: Challenges and opportunities for a research program. A response to Olweus. *European Journal of Developmental Psychology*, 9(5), 553-558.

- Smith, P. K., Mahdavi, J., Carvalho, Fisher, S. Russell, S., & Tippert, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *The Journal of Child Psychology and Psychiatry*, 49(4), 376-385.
- Topçu, Ç., Erdur-Barker, Ö., & Çapa-Aydin, Y. (2008). Examination of cyberbullying experiences among Turkish students from different school types. *CyberPsychology & Behavior*, 11(6), 643-648.
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying. *Computers in Human Behavior*, 26, 277-287.
- Turner, H.A., Finkelhor, D., Hamby, S. L., Shattuck, A. & Ormrod, R. K. (2011). Specifying the type and location of peer victimization in a national sample of children and youth. *Journal of Youth & Adolescence*, 40, 1052-1067.
- U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. (2011). *National crime victimization survey: School crime supplement, 2009* [Computer File]. ICPSR28201-v1. Ann Arbor, MI: Inter-University Consortium for Political and Social Research [distributor], 2011-01-21. doi: 10:3886/ ICPSR28201-v1
- Vandebosch, H., & van Cleemput, K. (2008). Defining cyberbullying: A qualitative research into the perceptions of youngsters. *CyberPsychology & Behavior*, 11(4), 499-503.
- Vargas, K., Henrich, C. C., & Meyers, J. (2009). Urban middle school students' perceptions of bullying, cyberbullying, and school safety. *Journal of School Violence*, 8, 159-176.
- Von Marees, N., & Petermann, F. (2012). Cyberbullying: An increasing challenge for schools. *School Psychology International*, 33(5), 467-476.
- Wade, A., & Beran, T. (2011). Cyberbullying: The new era of bullying. *Canadian Journal of School Psychology* 26(1), 44-61.

- Walrave, M., & Heirman, W. (2011). Cyberbullying: Predicting victimization and perpetration. *Children & Society, 25*, 59-72.
- Wang, J., Iannotti, R. J., & Nansel, T. R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent Health, 45*, 368-375.
- Willard, N. (2003). Off-campus, harmful online student speech. *Journal of School Violence, 2*(1), 63-93.
- Willard, N. (2007). Educator's guide to cyberbullying and cyber threats: Responding to the challenge of online social aggression, threats, and distress. Retrieved from <http://www.csriu.org/cyberbully/docs/cbecteducator.pdf>.
- Wright, V. H., Burnham, J. J., Inman, C. T., & Ogorchock, H. N. (2009). Cyberbullying: Using virtual scenarios to educate and raise awareness. *Journal of Computing in Teacher Education, 26*(1), 35-41.
- Wolak, J., Mitchell, K. J., & Finkelhor, D. (2007). Does online harassment constitute bullying? An exploration of online harassment by known peers and online-only contacts. *Journal of Adolescent Health, 41*, S51-S58.
- Wong, D. S. W., Chan, H. C., & Cheng, C. H. K. (2014). Cyberbullying perpetration and victimization among adolescents in Hong Kong. *Children and Youth Services Review, 36*, 133-140.
- Ybarra, M. L., Boyd, D., Korchmaros, J. D., & Oppenheim, J. (2012). Defining and measuring cyberbullying within the larger context of bullying victimization. *Journal of Adolescent Health, 51*, 53-58.

- Ybarra, M. L., Diner-West, M., & Leaf, P. J. (2007). Examining the overlap in Internet harassment and school bullying: Implications for school intervention. *Journal of Adolescent Health, 41*, S42-S50. doi: 10.1016/j.jadohealth.2007.09.004.
- Ybarra, M. L., & Mitchell, K. J. (2004). Online aggressor/targets, aggressors, and targets: A comparison of associated youth characteristics. *Journal of Child Psychology, 45*(7), 308-1316.
- Zhou, Z., Tang, H., Tian, Y., Wei, H., Zhang, F., & Morrison, C. M. (2013). Cyberbullying and its risk factors among Chinese high school students. *School Psychology International, 34*(6), 630-647.

APPENDIX A

ICPSR | INTER-UNIVERSITY CONSORTIUM FOR
POLITICAL AND SOCIAL RESEARCH

ICPSR 28201

**National Crime Victimization
Survey: School Crime
Supplement, 2009**

*United States Department of
Justice. Office of Justice
Programs. Bureau of Justice
Statistics*

Codebook

Inter-university
Consortium for
Political and Social
Research
P.O. Box 1248
Ann Arbor,
Michigan 48106
www.icpsr.umich.edu

NOTICE - We are conducting this survey under the authority of Title 13, United States Code, Section 8. Section 9 of this law requires us to keep all information you and your household strictly confidential. We may use this information only for statistical purposes. Also, Title 42, Section 3732, United States Code, authorizes the U.S. Census Bureau of Justice Statistics, Department of Justice, to collect information using this survey. Title 42, Sections 3789g and 3735, United States Code also requires the U.S. Census Bureau to keep all information about you and your household strictly confidential.

ASK OF ALL PEOPLE AGES 12-18

We estimate that it will take from 5 to 15 minutes to complete this interview with 10 minutes being the average time. If you have any comments regarding these estimates or any other aspect of this survey, send them to the Associate Director for Finance and Administration, Room 2027, U.S. Census Bureau, Washington DC 20233, or to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503. According to the Paperwork Reduction Act of 1995, no such persons are required to respond to a collection of information unless such collection displays a valid OMB control number.

Control number

PSU Segment/Suffix Sample Designation/Suffix Serial/Suffix HH No. Spinoff Indicator

FORM **SCS-1**

Economics and Statistics Administration
U.S. Census Bureau
ACTING AS COLLECTING AGENCY
BUREAU OF JUSTICE STATISTICS
U.S. DEPARTMENT OF JUSTICE

SCHOOL CRIME SUPPLEMENT
TO THE NATIONAL CRIME
VICTIMIZATION SURVEY
2009

FINAL QUESTIONNAIRE

A. FR Code

001

DDD

B. Respondent

Line No.

002

DD

Age

003

DD

Name

FIELD REPRESENTATIVE - Complete an SCS-1 form for all NCVS interviewed people ages 12-18. Do NOT complete an SCS-1 form for Type Z noninterview people or for people in Type A noninterview households.

C. Type of SCS Interview

004

1 D Personal - Self

2 D Telephone - Self

3 D Personal - Proxy 4

4 D Telephone - Proxy

5 D Noninterview - *FILL ITEM D*

SKIP to INTRO 1

D. Reason for SCS noninterview

005

2 D Refused

3 D Not available

INTRO 1 - Now I have some additional questions about your school. These answers will be kept confidential, but they will be used to help us understand the reasons for noninterview.

E. SCREEN QUESTIONS FOR SUPPLEMENT

1a. Did you attend school at any time this school year?

1b. During that time, were you ever home-schooled? That is, did you receive ANY of that schooling at home, rather than in a public or private school?

1c. Was all of your schooling this school year home schooling?

006

1 D Yes

2 D No - **END**

092

1 D Yes

2 D No - **SKIP to 2b**

007

1 D Yes - **END**

2 D No

2a. During the time you were home-schooled this school year, what grade would you have been in if you were in a public or private school?	093	0 D Fifth or under - END 1 D Sixth 2 D Seventh 3 D Eighth 4 D Ninth 5 D Tenth 6 D Eleventh 7 D Twelfth 8 D Other - <i>Specify</i> 9 D College/GED/Post-graduate/ Other noneligible - END
---	-----	--

2b. What grade are you in?	008	0 D Fifth or under - END 1 D Sixth 2 D Seventh 3 D Eighth 4 D Ninth 5 D Tenth 6 D Eleventh 7 D Twelfth 8 D Other - <i>Specify</i> _____ 9 D College/GED/Post-graduate/ Other noneligible - END
----------------------------	-----	--

E. SCREEN QUESTIONS FOR SUPPLEMENT

FIELD REPRESENTATIVE - *Read introduction only if any of the boxes 1-8 are marked in item 2a.*

INTRO 2 - The following questions pertain only to your attendance at a public or private school and not to being home-schooled.

3. In what month did your current school year <u>begin</u> ?	009	1 D August _____ 2 D September _____ 3 D Other - <i>Specify</i> _____ 4 D July (category created during post-data collection processing)
--	-----	---

F. ENVIRONMENTAL QUESTIONS

6a. What is the complete name of your school? _____	
6b. In what city, county, and state is your school located?	

<p>7a. Is your school public or private?</p> <p>_____</p> <p>7b. Is this the regular school that most of the students in your neighborhood attend?</p> <p>_____</p> <p>7c. Is your school church-related?</p>	<p>016 1 D Public - ASK 7b 2 D Private - SKIP to 7c</p> <p>017 1 D Yes SKIP to 8 2 D No</p> <p>018 1 D Yes 2 D No 3 D Don't know</p>
<p>8. What grades are taught in your school?</p> <p>Pre-K or Kindergarten 00 01 02 03 04 05 06 07 08 09 10 11 12 H.S. Senior 13 Post-graduate 20 All ungraded 30 All Special Education</p>	<p>Grades:</p> <p>020 DD (lowest) TO 021 DD (highest)</p>
<p>9. How [do you/did you] get to school most of the time this school year?</p> <p>FIELD REPRESENTATIVE - <i>If multiple modes are used, code the mode in which the student spends the most time.</i></p>	<p>022 1 D Walk 2 D School bus 3 D Public bus, subway, train 4 D Car 5 D Bicycle, motorbike, or motorcycle 6 D Some other way - <i>Specify</i></p>
<p>10. How long does it take you to get from your home to school most of the time?</p>	<p>023 1 D Less than 15 minutes 2 D 15-29 minutes 3 D 30-44 minutes 4 D 45-59 minutes 5 D 60 minutes or longer</p>

<p>11. How [do you/did you] get home from school most of the time this school year?</p> <p>FIELD REPRESENTATIVE - <i>If multiple modes are used, code the mode in which the student spends the most time.</i></p> <p><i>If the student volunteers that he or she does not go directly home after school, record the mode that the student uses to get to his or her first destination after school.</i></p>	<p>024</p> <p>1 D Walk 2 D School bus 3 D Public bus, subway, train 4 D Car 5 D Bicycle, motorbike, or motorcycle 6 D Some other way - <i>Specify</i></p>																								
<p>12a. How often do you leave school grounds at lunch time?</p> <p>(READ CATEGORIES)</p> <p>_____</p> <p>12b. Are students in your grade level allowed to leave school grounds to eat lunch?</p>	<p>026</p> <p>1 D Never 2 D Once or twice a year 3 D Once or twice a month 4 D Once or twice a week 5 D Almost every day</p> <p>025</p> <p>1 D Yes 2 D No 3 D Don't know</p>																								
<p>13. During this school year, have you participated in any of the following activities sponsored by your school:</p> <p>a. Athletic teams at school?</p> <p>b. Spirit groups, for example, Cheerleading, Dance Team, or Pep Club?</p> <p>c. Performing arts, for example, Band, Choir, Orchestra, or Drama?</p> <p>d. Academic clubs, for example, Debate Team, Honor Society, Spanish Club, or Math Club?</p> <p>e. Student government?</p> <p>f. [IF GRADES 6, 7, or 8] Community service or volunteer clubs sponsored by your school, for example, Peer Mediators, Ecology Club, or Recycling Club?</p> <p>[IF GRADES 9, 10, 11, or 12] Community service or volunteer clubs sponsored by your school, for example, Peer Mediators, Ecology Club, Key Club, or Interact?</p> <p>g. Other school clubs or school activities?</p>	<table border="1"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>120</td> <td>1 D</td> <td>2 D</td> </tr> <tr> <td>121</td> <td>1 D</td> <td>2 D</td> </tr> <tr> <td>122</td> <td>1 D</td> <td>2 D</td> </tr> <tr> <td>123</td> <td>1 D</td> <td>2 D</td> </tr> <tr> <td>124</td> <td>1 D</td> <td>2 D</td> </tr> <tr> <td>125</td> <td>1 D</td> <td>2 D</td> </tr> <tr> <td>126</td> <td>1 D</td> <td>2 D</td> </tr> </tbody> </table>		Yes	No	120	1 D	2 D	121	1 D	2 D	122	1 D	2 D	123	1 D	2 D	124	1 D	2 D	125	1 D	2 D	126	1 D	2 D
	Yes	No																							
120	1 D	2 D																							
121	1 D	2 D																							
122	1 D	2 D																							
123	1 D	2 D																							
124	1 D	2 D																							
125	1 D	2 D																							
126	1 D	2 D																							

14a.	Does your school take any measures to make sure students are safe? For example, does the school have: a. Security guards or assigned police officers? b. Other school staff or other adults supervising the hallway? c. Metal detectors? d. Locked entrance or exit doors during the day? e. A requirement that visitors sign in? f. Locker checks? g. A requirement that students wear badges or picture identification? h. One or more security cameras to monitor the school? i. A code of student conduct, that is, a set of written rules or guidelines that the school provides you?	028	1 D	2 D	3 D
		029	1 D	2 D	3 D
		030	1 D	2 D	3 D
		031	1 D	2 D	3 D
		032	1 D	2 D	3 D
		033	1 D	2 D	3 D
		094	1 D	2 D	3 D
		095	1 D	2 D	3 D
		096	1 D	2 D	3 D
14b.	If you hear about a threat to school or student safety, do you have a way to report it to someone in authority without giving your name? FIELD REPRESENTATIVE - The term 'authority' includes the police, teachers, principals, security guards, or other school staff. It does not include the student's parents, guardians, or peers.	167	1 D	2 D	3 D
15a.	In your classes, how often are you distracted from doing your schoolwork because other students are misbehaving, for example, talking or fighting? (READ CATEGORIES.)	156	1 D Never 2 D Almost never 3 D Sometimes 4 D Most of the time		
15b.	In general, how often do teachers punish students during your classes? (READ CATEGORIES.)	157	1 D Never 2 D Almost never 3 D Sometimes 4 D Most of the time		

<div>16a.</div> <div>I am going to read a list of statements that could describe a school. Thinking about your school, would you strongly agree, agree, disagree, or strongly disagree with the following...</div> <div><div>a.</div>Everyone knows what the school rules are.</div> <div><div>b.</div>The school rules are fair.</div> <div><div>c.</div>The punishment for breaking school rules is the same no matter who you are.</div> <div><div>d.</div>The school rules are strictly enforced.</div> <div><div>e.</div>If a school rule is broken, students know what kind of punishment will follow.</div>			Strongly Agree	Agree	Disagree	Strongly Disagree
	034	1 D	2 D	3 D	4 D	
	035	1 D	2 D	3 D	4 D	
	036	1 D	2 D	3 D	4 D	
	037	1 D	2 D	3 D	4 D	
	038	1 D	2 D	3 D	4 D	
<div>16b.</div> <div>Thinking about the TEACHERS at your school, would you strongly agree, agree, disagree, or strongly disagree with the following...</div> <div><div>a.</div>Teachers treat students with respect.</div> <div><div>b.</div>Teachers care about students.</div> <div><div>c.</div>Teachers do or say things that make students feel bad about themselves.</div>			Strongly Agree	Agree	Disagree	Strongly Disagree
	127	1 D	2 D	3 D	4 D	
	128	1 D	2 D	3 D	4 D	
	129	1 D	2 D	3 D	4 D	
<div>16c.</div> <div>Thinking about all of the ADULTS at your school, including teachers, would you strongly agree, agree, disagree, or strongly disagree with the following ...</div> <div><div>a.</div>At school, there is an ADULT you can talk to, who cares about your feelings and what happens to you.</div>			Strongly Agree	Agree	Disagree	Strongly Disagree
	130	1 D	2 D	3 D	4 D	
<div>16d.</div> <div>Thinking about FRIENDS at your school, would you strongly agree, agree, disagree, or strongly disagree with the following...</div> <div><div>a.</div>At school, you have a FRIEND you can talk to, who cares about your feelings and what happens to you.</div>			Strongly Agree	Agree	Disagree	Strongly Disagree
	132	1 D	2 D	3 D	4 D	
INTRO 3 - Now I have some questions about things that happen at school. For this survey, “at school” includes school building, on school property, on a school bus, or going to and from school. Your answers will be given to anyone.						

<p>17a. The following question refers to the availability of drugs and alcohol at your school.</p> <p>Tell me if you don't know what any of these items are.</p> <p>FIELD REPRESENTATIVE - For "Don't Know" responses, probe if necessary to determine if respondent means they do not know if the drug is available or if they do not know the drug.</p> <p>FIELD REPRESENTATIVE - For each item ask,</p> <p>Is it possible to get _____ at your school?</p> <p>a. Alcoholic beverages</p> <p>b. Marijuana</p> <p>c. Crack</p> <p>d. Other forms of cocaine</p> <p>e. Uppers such as ecstasy, crystal meth or other illegal stimulants</p> <p>f. Downers such as GHB or sleeping pills</p> <p>g. LSD or acid</p> <p>h. PCP or angel dust</p> <p>i. Heroin or smack</p> <p>j. Prescription drugs illegally obtained without a prescription, such as Oxycontin, Vicodin, or Xanax</p> <p>k. Other illegal drugs <i>If "Yes" is marked, ASK - What drugs? (Exclude tobacco products.)</i></p> <p>FIELD REPRESENTATIVE - Refer to Drug Slang Card (SCS-2). Reclassify the "other illegal drug(s)" to one of the categories a-l if possible. If able to reclassify the drug(s) mentioned, mark the "No" box in category j, otherwise, mark the "Yes" box in category j and enter the "other illegal drug(s)" mentioned in the Specify space.</p>	<table border="1"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> <th>Don't know</th> <th>Do not know</th> </tr> </thead> <tbody> <tr> <td>040</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> <td>4 D</td> </tr> <tr> <td>041</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> <td>4 D</td> </tr> <tr> <td>042</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> <td>4 D</td> </tr> <tr> <td>043</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> <td>4 D</td> </tr> <tr> <td>097</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> <td>4 D</td> </tr> <tr> <td>098</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> <td>4 D</td> </tr> <tr> <td>045</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> <td>4 D</td> </tr> <tr> <td>046</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> <td>4 D</td> </tr> <tr> <td>047</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> <td>4 D</td> </tr> <tr> <td>159</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> <td>4 D</td> </tr> <tr> <td>048</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> <td>4 D</td> </tr> <tr> <td colspan="5">Specify _____</td> </tr> </tbody> </table>		Yes	No	Don't know	Do not know	040	1 D	2 D	3 D	4 D	041	1 D	2 D	3 D	4 D	042	1 D	2 D	3 D	4 D	043	1 D	2 D	3 D	4 D	097	1 D	2 D	3 D	4 D	098	1 D	2 D	3 D	4 D	045	1 D	2 D	3 D	4 D	046	1 D	2 D	3 D	4 D	047	1 D	2 D	3 D	4 D	159	1 D	2 D	3 D	4 D	048	1 D	2 D	3 D	4 D	Specify _____				
	Yes	No	Don't know	Do not know																																																														
040	1 D	2 D	3 D	4 D																																																														
041	1 D	2 D	3 D	4 D																																																														
042	1 D	2 D	3 D	4 D																																																														
043	1 D	2 D	3 D	4 D																																																														
097	1 D	2 D	3 D	4 D																																																														
098	1 D	2 D	3 D	4 D																																																														
045	1 D	2 D	3 D	4 D																																																														
046	1 D	2 D	3 D	4 D																																																														
047	1 D	2 D	3 D	4 D																																																														
159	1 D	2 D	3 D	4 D																																																														
048	1 D	2 D	3 D	4 D																																																														
Specify _____																																																																		
<p>17b. During this school year, did you know for sure that any students were on drugs or alcohol while they were at school?</p>	<p>101 1 D Yes 2 D No</p>																																																																	

17c.	During this school year, did anyone offer, or try to sell or give you an illegal drug other than alcohol or tobacco at your school?	102	1 D Yes 2 D No
G. FIGHTING, BULLYING AND HATE BEHAVIORS			
18a.	During this school year, have you been in one or more physical fights at school?	103	1 D Yes 2 D No - SKIP to 19a
18b.	During this school year, how many times have you been in a physical fight at school?	104	DDD (Number of times)
19a.	<p>Now I have some questions about what students do at school that make you feel bad or are hurtful to you. We often refer to this as being bullied. You may include events you told me about already. During this school year, has any student bullied you?</p> <p>That is, has another student...</p> <p><i>(Read each category a-g.)</i></p> <p>a. Made fun of you, called you names, or insulted you?</p> <p>b. Spread rumors about you?</p> <p>c. Threatened you with harm?</p> <p>d. Pushed you, shoved you, tripped you, or spit on you?</p> <p>e. Tried to make you do things you did not want to do, for example, give them money or other things?</p> <p>f. Excluded you from activities on purpose?</p> <p>g. Destroyed your property on purpose?</p>		<p>Yes No</p> <p>134 1 D 2 D</p> <p>135 1 D 2 D</p> <p>136 1 D 2 D</p> <p>137 1 D 2 D</p> <p>138 1 D 2 D</p> <p>139 1 D 2 D</p> <p>140 1 D 2 D</p>
Check Item 19a	Are all categories a-g marked "No" in Q19a above?	1 D 2 D	Yes - SKIP to 20a No - SKIP to 19b
19b.	<p>You just indicated that someone had bullied you during this school year. Thinking about all of the ways in which you were bullied, how often did all of those things happen?</p> <p><i>(READ CATEGORIES 1-4.)</i></p>	142	<p>1 D Once or twice this school year 2 D Once or twice a month 3 D Once or twice a week, or 4 D Almost every day 5 D Don't know</p>

<p>19c. Still thinking about all of the times you were bullied, where did the bullying occur? Did it occur ...</p> <p><i>(READ CATEGORIES) Mark (X) all that apply</i></p>	<p>143 1 D In a classroom at school?</p> <p>168 2 D In a hallway or stairwell at school?</p> <p>169 3 D In a bathroom or locker room at school?</p> <p>146 4 D Somewhere else inside the school building? Specify --+</p> <p>144 5 D Outside on school grounds?</p> <p>145 6 D On a school bus?</p> <p>173 7 D Cafeteria? (category created during post data collection processing)</p>																					
<p>19d. Was a teacher or some other adult at school notified about this bullying?</p>	<p>147 1 D Yes</p> <p>2 D No</p>																					
<p>CHECK Item B Is Box 4 in Question 19a marked?</p>	<p>1 D Yes - Ask 19e</p> <p>2 D No - Skip to 20a</p>																					
<p>19e. What were the injuries you suffered as a result of being pushed, shoved, tripped, or spit on?</p> <p><i>Mark (X) all that apply</i></p>	<p>148 1 D None</p> <p>149 2 D Bruises or swelling</p> <p>150 3 D Cuts, scratches, or scrapes</p> <p>151 4 D Black eye/bloody nose</p> <p>152 5 D Teeth chipped or knocked out</p> <p>153 6 D Broken bones/internal injuries</p> <p>154 7 D Knocked unconscious</p> <p>155 8 D Other - Specify _____</p>																					
<p>20a. Now I have some questions about what students do that could occur <i>anywhere</i> and that make you feel bad or are hurtful to you. You may include events you told me about already.</p> <p>During this school year, has another student....</p> <p><i>(Read each category a-f.)</i></p> <p>a. Posted hurtful information about you on the Internet, for example, on a social networking site like MySpace or Facebook?</p> <p>b. Threatened or insulted you through email?</p> <p>c. Threatened or insulted you through instant messaging?</p> <p>d. Threatened or insulted you through text messaging?</p> <p>e. Threatened or insulted you through online gaming, for example, while playing a game, through Second Life, or through XBOX?</p> <p>f. Purposefully excluded you from an online community, for example, a buddy list or friends list?</p>	<table border="0"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>161 1 D</td> <td>2 D</td> <td></td> </tr> <tr> <td>170 1 D</td> <td>2 D</td> <td></td> </tr> <tr> <td>162 1 D</td> <td>2 D</td> <td></td> </tr> <tr> <td>163 1 D</td> <td>2 D</td> <td></td> </tr> <tr> <td>171 1 D</td> <td>2 D</td> <td></td> </tr> <tr> <td>172 1 D</td> <td>2 D</td> <td></td> </tr> </tbody> </table>		Yes	No	161 1 D	2 D		170 1 D	2 D		162 1 D	2 D		163 1 D	2 D		171 1 D	2 D		172 1 D	2 D	
	Yes	No																				
161 1 D	2 D																					
170 1 D	2 D																					
162 1 D	2 D																					
163 1 D	2 D																					
171 1 D	2 D																					
172 1 D	2 D																					

Check Item 20a	Are all categories a-f marked “No” in Q20a above?	1 D Yes - SKIP to 21a 2 D No - SKIP to 20b																												
20b.	<p>You just indicated that someone had bullied you during this school year. Thinking about all of the ways in which you were bullied, how often did all of those things happen?</p> <p>(READ CATEGORIES 1-4)</p>	165 1 D Once or twice this school year 2 D Once or twice a month 3 D Once or twice a week, or 4 D Almost every day 5 D Don't know																												
20c.	Was a teacher or some other adult <i>at school</i> notified about this bullying?	166 1 D Yes 2 D No																												
21a.	During this school year, has anyone called you an insulting or bad name at school having to do with your race, religion, ethnic background or national origin, disability, gender, or sexual orientation? We call these hate-related words.	065 1 D Yes 2 D No - SKIP to 22																												
21b.	<p>Were any of the hate-related words related to ...</p> <p>a. Your race?</p> <p>b. Your religion?</p> <p>c. Your ethnic background or national origin (for example, people of Hispanic origin)?</p> <p>d. Any disability (by this I mean physical, mental, or developmental disabilities) you may have?</p> <p>e. Your gender?</p> <p>f. Your sexual orientation?</p> <p>If “Yes,” SAY - (by this we mean homosexual, bisexual, or heterosexual)</p>	<table border="0"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> <th>Don't know</th> </tr> </thead> <tbody> <tr> <td>107SCS</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> </tr> <tr> <td>108SCS</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> </tr> <tr> <td>109SCS</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> </tr> <tr> <td>110SCS</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> </tr> <tr> <td>111SCS</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> </tr> <tr> <td>112SCS</td> <td>1 D</td> <td>2 D</td> <td>3 D</td> </tr> </tbody> </table>		Yes	No	Don't know	107SCS	1 D	2 D	3 D	108SCS	1 D	2 D	3 D	109SCS	1 D	2 D	3 D	110SCS	1 D	2 D	3 D	111SCS	1 D	2 D	3 D	112SCS	1 D	2 D	3 D
	Yes	No	Don't know																											
107SCS	1 D	2 D	3 D																											
108SCS	1 D	2 D	3 D																											
109SCS	1 D	2 D	3 D																											
110SCS	1 D	2 D	3 D																											
111SCS	1 D	2 D	3 D																											
112SCS	1 D	2 D	3 D																											
22.	During this school year, have you seen any hate-related words or symbols written in school classrooms, school bathrooms, school hallways, or on the outside of your school building?	066 1 D Yes 2 D No																												
H. AVOIDANCE																														
23a.	During this school year, did you ever STAY AWAY from any of the following places because you thought someone might attack or harm you there?																													

(READ CATEGORIES.)		Yes	No
a.	The shortest route to school?	068	1 D 2 D
b.	The entrance into the school?	069	1 D 2 D
c.	Any hallways or stairs in school?	070	1 D 2 D
d.	Parts of the school cafeteria?	071	1 D 2 D
e.	Any school restrooms?	072	1 D 2 D
f.	Other places inside the school building?	073	1 D 2 D
g.	School parking lot?	074	1 D 2 D
h.	Other places on school grounds?	075	1 D 2 D
23b.	Did you AVOID any activities at your school because you thought someone might attack or harm you?	076	1 D Yes 2 D No
23c.	Did you AVOID any classes because you thought someone might attack or harm you?	077	1 D Yes 2 D No
23d.	Did you stay home from school because you thought someone might attack or harm you in the school building, on school property, on a school bus, or going to or from school?	078	1 D Yes 2 D No
I. FEAR			
24.	How often are you afraid that someone will attack or harm you in the school building or on school property? (READ CATEGORIES.)	079	1 D Never 2 D Almost never 3 D Sometimes 4 D Most of the time
25.	How often are you afraid that someone will attack or harm you on a school bus or on the way to and from school? (READ CATEGORIES)	080	1 D Never 2 D Almost never 3 D Sometimes 4 D Most of the time
26.	Besides the times you are in the school building, on school property, on a school bus, or going to or from school, how often are you afraid that someone will attack or harm you? (READ CATEGORIES)	081	1 D Never 2 D Almost never 3 D Sometimes 4 D Most of the time
J. WEAPONS			
27.	Some people bring guns, knives, or objects that		

<p>can be used as weapons to school for protection. During this school year, did YOU ever bring the following to school or onto school grounds?</p> <p>(READ CATEGORIES.)</p> <p>a. A gun?</p> <p>b. A knife brought as a weapon?</p> <p>c. Some other weapon?</p>	<table border="0"> <tr> <td></td> <td>Yes</td> <td>No</td> </tr> <tr> <td>082</td> <td>1 D</td> <td>2 D</td> </tr> <tr> <td>083</td> <td>1 D</td> <td>2 D</td> </tr> <tr> <td>084</td> <td>1 D</td> <td>2 D</td> </tr> </table>		Yes	No	082	1 D	2 D	083	1 D	2 D	084	1 D	2 D
	Yes	No											
082	1 D	2 D											
083	1 D	2 D											
084	1 D	2 D											
<p>28a. Do you know of any other students who have brought a gun to your school during this school year?</p>	<p>085 1 D Yes 2 D No - <u>Skip to 29</u></p>												
<p>28b. Have you actually seen another student with a gun at school during this school year?</p>	<p>086 1 D Yes 2 D No 3 D Don't know</p>												
<p>29. During this school year, could you have gotten a loaded gun without adult permission, either at school or away from school?</p>	<p>113 1 D Yes 2 D No</p>												
<p style="text-align: center;">K. GANGS</p>													
<p>INTRO 4 - Now, we'd like to know about gangs at your school. You may know these as street gangs, fighting crews, or something else. Gangs may use common names, signs, symbols, or colors. For this survey we are interested in all gangs, whether or not they are involved in violent or illegal activity. Your responses are confidential.</p>													
<p>30. Are there any gangs at your school?</p>	<p>058 1 D Yes 2 D No - SKIP to 33a 3 D Don't know</p>												
<p>31. During this school year, how often have gangs been involved in fights, attacks, or other violence at your school?</p> <p>(READ CATEGORIES 1-5)</p>	<p>089 1 D Never 2 D Once or twice this school year 3 D Once or twice a month 4 D Once or twice a week, or 5 D Almost every day 6 D Don't know</p>												
<p>32. Have gangs been involved in the sale of drugs at your school during this school year?</p>	<p>090 1 D Yes 2 D No 3 D Don't know</p>												
<p style="text-align: center;">L. STUDENT CHARACTERISTICS</p>													
<p>33a. During the last 4 weeks of school, did you skip any classes?</p>	<p>114 1 D Yes 2 D No - SKIP to 34 3 D Don't know - SKIP to 34</p>												
<p>33b. During the last 4 weeks of school, on how many days did you skip at least one class?</p>	<p>115 DD (Number of days)</p>												

34.	During this school year, across all subjects have you gotten mostly - (<i>READ CATEGORIES 1-5</i>)	116	1 D A's 2 D B's 3 D C's 4 D D's 5 D F's 6 D School does not give grades/no alphabetic grade equivalent
35.	Thinking about the future, do you think you will ... a. Attend school after high school? b. Graduate from a 4-year college?	117	Yes No Don't know 1 D 2 D -- END 3 D
		118	1 D 2 D 3 D

VITA

Mary Anne Howlett-Brandon was born on April 22, 1959, in Hattiesburg, Mississippi and is an American citizen. She graduated from Pascagoula High School in Pascagoula, Mississippi in 1977. She received a Bachelor of Social Work from the University of Mississippi in 1983, and a Bachelor of Arts in History from Park University, Parkville, Missouri in 1996. She taught in the public schools in Stafford, Virginia for 4 years. She served as a school administer in Stafford County, Virginia and Bedford County, Virginia for 8 years. She received a Master of Secondary Education from Old Dominion University in 2001.